

Table 538. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. June 1950-1964

HOUR	NUMBER OF OBSERVATIONS 10800														TOTAL
	MIDNIGHT MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)														
≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	-24	≥ 25	MISSING		TOTAL
1	0.21	0.28	0.69	0.95	1.09	0.58	0.27	0.04	0.03	0.00	0.00	0.00	0.03	0.03	4.17
2	0.20	0.23	0.53	0.98	1.21	0.59	0.26	0.07	0.03	0.00	0.00	0.00	0.03	0.03	4.17
3	0.19	0.21	0.58	1.09	1.10	0.63	0.21	0.09	0.01	0.01	0.01	0.00	0.03	0.03	4.17
4	0.19	0.19	0.61	0.99	1.07	0.71	0.22	0.10	0.01	0.01	0.00	0.01	0.04	0.04	4.17
5	0.15	0.31	0.70	0.92	1.08	0.57	0.28	0.10	0.00	0.02	0.00	0.00	0.03	0.03	4.17
6	0.14	0.23	0.61	1.18	1.05	0.61	0.24	0.06	0.01	0.01	0.01	0.00	0.03	0.03	4.17
7	0.11	0.09	0.39	1.15	1.33	0.72	0.23	0.07	0.01	0.02	0.00	0.01	0.03	0.03	4.17
8	0.11	0.07	0.37	1.04	1.46	0.74	0.27	0.06	0.03	0.00	0.00	0.00	0.01	0.01	4.17
9	0.06	0.07	0.31	1.03	1.41	0.84	0.34	0.03	0.02	0.01	0.01	0.00	0.03	0.03	4.17
10	0.03	0.07	0.28	0.99	1.47	0.84	0.33	0.09	0.03	0.01	0.00	0.00	0.02	0.02	4.17
11	0.03	0.02	0.31	0.94	1.35	0.86	0.50	0.11	0.01	0.00	0.00	0.00	0.03	0.03	4.17
12	0.02	0.06	0.23	0.89	1.45	0.96	0.38	0.11	0.02	0.00	0.01	0.02	0.02	0.02	4.17
13	0.03	0.06	0.26	0.81	1.50	0.90	0.40	0.12	0.06	0.00	0.00	0.00	0.03	0.03	4.17
14	0.06	0.08	0.21	0.99	1.23	0.98	0.44	0.10	0.05	0.00	0.00	0.00	0.02	0.02	4.17
15	0.06	0.07	0.30	0.86	1.22	0.99	0.40	0.16	0.07	0.01	0.00	0.00	0.03	0.03	4.17
16	0.06	0.05	0.23	0.93	1.33	0.91	0.40	0.15	0.04	0.03	0.03	0.00	0.03	0.03	4.17
17	0.03	0.05	0.37	0.85	1.36	0.95	0.37	0.11	0.03	0.02	0.00	0.00	0.03	0.03	4.17
18	0.05	0.08	0.49	0.89	1.43	0.77	0.28	0.14	0.03	0.01	0.00	0.00	0.01	0.01	4.17
19	0.10	0.13	0.53	1.02	1.19	0.78	0.26	0.10	0.02	0.03	0.00	0.00	0.02	0.02	4.17
20	0.16	0.20	0.54	1.11	1.02	0.67	0.30	0.09	0.06	0.01	0.00	0.00	0.02	0.02	4.17
21	0.18	0.31	0.66	1.14	0.94	0.64	0.19	0.06	0.01	0.01	0.01	0.00	0.02	0.02	4.17
22	0.28	0.36	0.62	1.06	0.96	0.56	0.20	0.09	0.02	0.00	0.00	0.00	0.02	0.02	4.17
23	0.25	0.42	0.73	0.94	1.06	0.47	0.19	0.07	0.02	0.00	0.00	0.00	0.02	0.02	4.17
24	0.20	0.38	0.72	0.94	1.01	0.53	0.28	0.05	0.01	0.02	0.00	0.00	0.03	0.03	4.17
TOTAL	2.88	4.08	11.28	23.69	29.34	17.81	7.24	2.19	0.60	0.23	0.06	0.03	0.56		

HOUR	NUMBER OF OBSERVATIONS 10800														TOTAL
	U' HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)														
≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	-24	≥ 25	MISSING		TOTAL
1	0.06	0.05	0.32	0.56	0.95	1.00	0.69	0.26	0.15	0.08	0.01	0.00	0.03	0.03	4.17
2	0.05	0.07	0.22	0.68	1.04	0.90	0.68	0.27	0.12	0.09	0.03	0.00	0.03	0.03	4.17
3	0.06	0.07	0.16	0.69	1.06	1.06	0.57	0.22	0.14	0.07	0.03	0.00	0.03	0.03	4.17
4	0.06	0.04	0.31	0.57	1.26	0.87	0.53	0.28	0.15	0.06	0.01	0.01	0.04	0.04	4.17
5	0.05	0.07	0.40	0.60	1.09	0.92	0.56	0.23	0.13	0.07	0.01	0.00	0.03	0.03	4.17
6	0.04	0.10	0.27	0.54	0.95	1.07	0.65	0.35	0.12	0.04	0.01	0.00	0.03	0.03	4.17
7	0.07	0.04	0.19	0.37	0.94	1.16	0.79	0.36	0.08	0.06	0.01	0.03	0.03	0.03	4.17
8	0.06	0.09	0.10	0.34	0.88	1.24	0.86	0.37	0.12	0.06	0.01	0.02	0.01	0.01	4.17
9	0.06	0.05	0.15	0.31	0.70	1.32	0.96	0.36	0.15	0.04	0.04	0.01	0.03	0.03	4.17
10	0.02	0.04	0.09	0.32	0.82	1.31	0.98	0.40	0.13	0.01	0.02	0.01	0.02	0.02	4.17
11	0.01	0.03	0.12	0.36	0.64	1.24	1.00	0.44	0.21	0.05	0.04	0.01	0.02	0.02	4.17
12	0.00	0.04	0.07	0.35	0.70	1.17	1.06	0.49	0.17	0.05	0.05	0.01	0.02	0.02	4.17
13	0.03	0.05	0.10	0.32	0.66	1.24	0.97	0.54	0.11	0.11	0.01	0.00	0.03	0.03	4.17
14	0.05	0.02	0.12	0.43	0.62	1.18	0.90	0.63	0.14	0.05	0.01	0.02	0.02	0.02	4.17
15	0.03	0.05	0.13	0.40	0.69	1.11	0.89	0.56	0.17	0.07	0.02	0.02	0.03	0.03	4.17
16	0.06	0.05	0.06	0.36	0.80	1.00	1.02	0.48	0.17	0.05	0.06	0.05	0.03	0.03	4.17
17	0.04	0.04	0.07	0.31	0.98	1.06	0.93	0.49	0.09	0.08	0.04	0.02	0.03	0.03	4.17
18	0.04	0.05	0.14	0.48	0.79	1.15	0.94	0.31	0.15	0.06	0.05	0.02	0.02	0.02	4.17
19	0.05	0.08	0.18	0.54	0.95	0.82	0.84	0.42	0.16	0.06	0.04	0.00	0.03	0.03	4.17
20	0.06	0.10	0.20	0.66	0.88	0.85	0.69	0.50	0.13	0.06	0.00	0.01	0.03	0.03	4.17
21	0.04	0.11	0.31	0.59	0.94	0.91	0.67	0.29	0.21	0.05	0.02	0.01	0.03	0.03	4.17
22	0.09	0.08	0.32	0.64	0.89	0.88	0.63	0.38	0.18	0.04	0.00	0.01	0.03	0.03	4.17
23	0.04	0.14	0.36	0.62	0.86	0.95	0.58	0.35	0.14	0.06	0.00	0.02	0.04	0.04	4.17
24	0.06	0.07	0.34	0.56	0.96	1.03	0.63	0.30	0.10	0.06	0.02	0.01	0.03	0.03	4.17
TOTAL	1.08	1.52	4.74	11.61	21.07	25.43	19.01	9.28	3.41	1.42	0.56	0.25	0.62		

Table 539. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. July 1950-1964

NUMBER OF OBSERVATIONS 11160														
MIDWAY MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)														
HOUR	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	TOTAL
1	0.26	0.35	0.70	0.99	1.01	0.55	0.14	0.07	0.04	0.00	0.01	0.00	0.04	4.17
2	0.21	0.31	0.75	1.00	0.97	0.59	0.17	0.05	0.03	0.02	0.01	0.00	0.05	4.17
3	0.16	0.17	0.68	1.08	1.08	0.68	0.12	0.08	0.04	0.01	0.01	0.00	0.06	4.17
4	0.13	0.16	0.60	1.12	1.09	0.64	0.24	0.07	0.04	0.01	0.02	0.00	0.05	4.17
5	0.10	0.22	0.64	1.05	1.12	0.67	0.19	0.08	0.02	0.04	0.00	0.00	0.05	4.17
6	0.11	0.16	0.60	1.04	1.22	0.60	0.27	0.08	0.04	0.00	0.00	0.00	0.05	4.17
7	0.08	0.15	0.46	1.06	1.23	0.65	0.30	0.11	0.05	0.02	0.01	0.00	0.05	4.17
8	0.04	0.11	0.37	0.92	1.28	0.82	0.39	0.13	0.04	0.01	0.00	0.00	0.05	4.17
9	0.03	0.02	0.24	0.82	1.42	0.99	0.42	0.14	0.04	0.01	0.00	0.00	0.04	4.17
10	0.01	0.04	0.22	0.73	1.49	1.01	0.43	0.15	0.04	0.00	0.00	0.00	0.04	4.17
11	0.04	0.05	0.21	0.78	1.30	1.03	0.49	0.17	0.04	0.00	0.02	0.00	0.04	4.17
12	0.03	0.04	0.16	0.86	1.36	0.84	0.48	0.20	0.14	0.02	0.00	0.00	0.04	4.17
13	0.03	0.05	0.18	0.63	1.37	0.94	0.58	0.26	0.05	0.01	0.02	0.01	0.04	4.17
14	0.02	0.04	0.18	0.65	1.24	1.19	0.54	0.16	0.06	0.04	0.01	0.02	0.04	4.17
15	0.04	0.03	0.17	0.64	1.34	1.07	0.52	0.18	0.09	0.03	0.04	0.01	0.04	4.17
16	0.04	0.04	0.22	0.69	1.24	1.14	0.43	0.18	0.10	0.03	0.00	0.02	0.04	4.17
17	0.02	0.06	0.31	0.62	1.37	1.01	0.42	0.22	0.05	0.02	0.01	0.01	0.04	4.17
18	0.07	0.10	0.25	0.96	1.33	0.82	0.36	0.15	0.04	0.01	0.01	0.02	0.04	4.17
19	0.10	0.18	0.46	1.09	1.23	0.66	0.28	0.09	0.00	0.01	0.02	0.00	0.05	4.17
20	0.22	0.27	0.77	1.00	1.02	0.57	0.16	0.08	0.02	0.01	0.00	0.00	0.04	4.17
21	0.28	0.39	0.78	1.12	0.83	0.44	0.22	0.04	0.01	0.00	0.01	0.00	0.04	4.17
22	0.30	0.37	0.83	0.99	0.90	0.47	0.20	0.04	0.02	0.00	0.00	0.00	0.04	4.17
23	0.25	0.30	0.82	1.10	0.93	0.43	0.22	0.04	0.02	0.01	0.00	0.00	0.05	4.17
24	0.28	0.41	0.68	1.03	0.95	0.53	0.17	0.04	0.02	0.01	0.01	0.00	0.04	4.17
TOTAL	2.81	4.01	11.29	21.96	28.30	18.35	7.73	2.82	1.06	0.29	0.19	0.08	1.10	

NUMBER OF OBSERVATIONS 11160														
D' HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)														
HOUR	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	TOTAL
1	0.06	0.04	0.40	0.50	0.99	1.07	0.69	0.26	0.06	0.03	0.03	0.00	0.04	4.17
2	0.03	0.12	0.25	0.65	0.99	0.98	0.74	0.23	0.06	0.04	0.01	0.01	0.05	4.17
3	0.04	0.05	0.29	0.58	0.99	1.05	0.71	0.27	0.09	0.04	0.01	0.00	0.05	4.17
4	0.02	0.07	0.22	0.52	1.01	1.11	0.72	0.27	0.12	0.03	0.04	0.00	0.05	4.17
5	0.03	0.06	0.25	0.56	1.09	1.11	0.58	0.24	0.14	0.03	0.01	0.00	0.05	4.17
6	0.04	0.02	0.26	0.64	1.03	0.96	0.66	0.26	0.21	0.04	0.01	0.00	0.05	4.17
7	0.04	0.03	0.13	0.52	0.83	1.05	0.84	0.38	0.20	0.05	0.03	0.01	0.05	4.17
8	0.04	0.06	0.13	0.31	0.82	0.97	1.04	0.42	0.22	0.07	0.04	0.01	0.05	4.17
9	0.01	0.04	0.09	0.24	0.68	1.09	1.09	0.48	0.28	0.07	0.03	0.02	0.04	4.17
10	0.02	0.04	0.13	0.18	0.77	1.02	0.99	0.64	0.21	0.11	0.01	0.02	0.04	4.17
11	0.03	0.04	0.09	0.35	0.72	0.83	1.13	0.55	0.27	0.06	0.07	0.00	0.04	4.17
12	0.04	0.04	0.13	0.31	0.57	1.04	0.98	0.62	0.27	0.08	0.05	0.01	0.04	4.17
13	0.05	0.02	0.13	0.26	0.70	0.87	1.09	0.61	0.22	0.13	0.03	0.03	0.04	4.17
14	0.04	0.04	0.04	0.22	0.73	1.08	1.09	0.48	0.20	0.14	0.05	0.01	0.04	4.17
15	0.04	0.04	0.10	0.22	0.72	0.97	1.04	0.63	0.28	0.07	0.02	0.03	0.04	4.17
16	0.01	0.05	0.13	0.31	0.71	0.97	1.04	0.56	0.23	0.04	0.04	0.04	0.04	4.17
17	0.01	0.01	0.13	0.37	0.62	1.09	0.97	0.64	0.20	0.04	0.04	0.01	0.04	4.17
18	0.03	0.04	0.15	0.41	0.73	0.95	1.02	0.46	0.17	0.11	0.04	0.03	0.04	4.17
19	0.03	0.12	0.23	0.42	0.83	1.08	0.92	0.23	0.16	0.07	0.01	0.02	0.04	4.17
20	0.08	0.15	0.31	0.66	0.92	0.80	0.72	0.21	0.21	0.04	0.02	0.01	0.04	4.17
21	0.07	0.15	0.30	0.79	0.89	0.79	0.69	0.27	0.07	0.04	0.05	0.00	0.05	4.17
22	0.07	0.11	0.32	0.76	0.85	0.92	0.70	0.26	0.08	0.04	0.00	0.01	0.04	4.17
23	0.05	0.10	0.31	0.59	0.91	1.06	0.70	0.26	0.08	0.04	0.01	0.00	0.04	4.17
24	0.09	0.09	0.30	0.56	0.99	1.01	0.66	0.27	0.08	0.04	0.01	0.00	0.04	4.17
TOTAL	0.96	1.51	4.83	10.96	20.08	23.85	20.82	9.48	4.09	1.46	0.64	0.24	1.09	

Table 540. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. August 1950-1964

HOUR	NUMBER OF OBSERVATIONS 11160														TOTAL
	MIDWAY MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)														
	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING			
1	0.14	0.25	0.73	1.14	1.24	0.47	0.13	0.03	0.04	0.00	0.00	0.00	0.00	0.00	4.17
2	0.15	0.24	0.63	1.14	1.32	0.55	0.11	0.02	0.01	0.01	0.00	0.00	0.00	0.00	4.17
3	0.16	0.20	0.63	1.14	1.31	0.60	0.11	0.03	0.00	0.00	0.00	0.00	0.00	0.00	4.17
4	0.08	0.19	0.63	1.11	1.31	0.70	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	4.17
5	0.09	0.12	0.60	1.08	1.42	0.66	0.18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	4.17
6	0.10	0.27	0.60	1.04	1.35	0.65	0.13	0.02	0.00	0.00	0.00	0.01	0.00	0.00	4.17
7	0.14	0.15	0.60	1.02	1.27	0.72	0.23	0.02	0.01	0.00	0.00	0.00	0.00	0.00	4.17
8	0.06	0.13	0.54	0.93	1.45	0.75	0.24	0.03	0.02	0.00	0.00	0.00	0.01	0.01	4.17
9	0.04	0.11	0.30	0.86	1.39	0.92	0.44	0.08	0.01	0.00	0.01	0.00	0.01	0.01	4.17
10	0.04	0.07	0.21	0.87	1.35	1.10	0.39	0.13	0.01	0.00	0.00	0.00	0.01	0.01	4.17
11	0.01	0.03	0.19	0.73	1.34	1.15	0.53	0.13	0.04	0.02	0.01	0.00	0.01	0.01	4.17
12	0.01	0.04	0.13	0.64	1.36	1.26	0.51	0.16	0.03	0.00	0.00	0.00	0.02	0.02	4.17
13	0.02	0.02	0.15	0.70	1.31	1.22	0.50	0.15	0.07	0.01	0.00	0.00	0.02	0.02	4.17
14	0.04	0.05	0.22	0.61	1.22	1.19	0.47	0.21	0.12	0.02	0.01	0.00	0.01	0.01	4.17
15	0.04	0.04	0.18	0.63	1.41	1.09	0.51	0.17	0.08	0.02	0.00	0.01	0.00	0.01	4.17
16	0.04	0.06	0.17	0.60	1.37	0.98	0.53	0.28	0.10	0.03	0.02	0.00	0.00	0.00	4.17
17	0.06	0.08	0.18	0.75	1.34	0.89	0.52	0.22	0.07	0.04	0.01	0.00	0.00	0.00	4.17
18	0.13	0.09	0.32	0.94	1.45	0.73	0.30	0.14	0.05	0.01	0.01	0.00	0.00	0.00	4.17
19	0.17	0.26	0.77	1.19	1.14	0.43	0.14	0.04	0.01	0.01	0.00	0.00	0.00	0.00	4.17
20	0.25	0.28	1.00	1.08	1.00	0.41	0.10	0.04	0.00	0.00	0.00	0.00	0.00	0.00	4.17
21	0.37	0.43	0.84	1.10	0.87	0.48	0.06	0.00	0.00	0.01	0.00	0.00	0.00	0.00	4.17
22	0.35	0.32	0.85	1.23	0.86	0.46	0.08	0.02	0.00	0.00	0.00	0.00	0.00	0.00	4.17
23	0.28	0.38	0.84	1.14	1.03	0.31	0.15	0.03	0.00	0.01	0.00	0.00	0.00	0.00	4.17
24	0.19	0.32	0.74	1.20	1.16	0.42	0.10	0.01	0.02	0.00	0.00	0.00	0.00	0.00	4.17
TOTAL	2.95	4.13	12.07	22.87	30.27	18.14	6.60	1.96	0.68	0.17	0.06	0.02	0.08		

HOUR	NUMBER OF OBSERVATIONS 11160														TOTAL
	U' HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)														
	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING			
1	0.01	0.04	0.24	0.70	1.36	0.91	0.58	0.15	0.08	0.05	0.02	0.01	0.01	0.01	4.17
2	0.02	0.04	0.24	0.65	1.35	1.05	0.52	0.17	0.07	0.03	0.01	0.02	0.00	0.00	4.17
3	0.02	0.07	0.15	0.54	1.53	1.05	0.52	0.17	0.07	0.02	0.01	0.00	0.00	0.00	4.17
4	0.02	0.04	0.16	0.56	1.46	1.12	0.55	0.18	0.03	0.04	0.01	0.01	0.00	0.00	4.17
5	0.00	0.04	0.15	0.48	1.48	1.16	0.58	0.17	0.06	0.02	0.00	0.01	0.00	0.00	4.17
6	0.04	0.03	0.16	0.62	1.46	1.07	0.53	0.19	0.04	0.01	0.01	0.02	0.00	0.00	4.17
7	0.04	0.03	0.22	0.73	1.21	0.91	0.62	0.24	0.13	0.03	0.01	0.00	0.00	0.00	4.17
8	0.00	0.07	0.22	0.56	1.16	1.01	0.72	0.22	0.13	0.03	0.02	0.01	0.01	0.01	4.17
9	0.03	0.04	0.16	0.43	0.99	1.08	0.76	0.41	0.19	0.04	0.00	0.03	0.01	0.01	4.17
10	0.04	0.06	0.12	0.33	0.78	1.25	0.94	0.40	0.16	0.02	0.05	0.01	0.01	0.01	4.17
11	0.01	0.01	0.06	0.32	0.90	1.12	1.07	0.49	0.12	0.02	0.04	0.01	0.01	0.01	4.17
12	0.00	0.02	0.08	0.31	0.75	1.30	0.87	0.55	0.18	0.05	0.02	0.02	0.02	0.02	4.17
13	0.02	0.04	0.10	0.29	0.75	1.09	1.02	0.56	0.20	0.04	0.03	0.00	0.02	0.02	4.17
14	0.04	0.03	0.13	0.26	0.78	1.08	1.08	0.44	0.21	0.05	0.05	0.02	0.01	0.01	4.17
15	0.03	0.02	0.04	0.25	0.72	1.23	1.07	0.56	0.14	0.06	0.04	0.01	0.00	0.00	4.17
16	0.06	0.04	0.08	0.31	0.60	1.25	1.04	0.50	0.18	0.05	0.03	0.03	0.00	0.00	4.17
17	0.05	0.04	0.11	0.35	0.71	1.08	1.02	0.57	0.15	0.04	0.00	0.03	0.00	0.00	4.17
18	0.09	0.03	0.15	0.47	1.04	1.04	0.77	0.42	0.08	0.05	0.00	0.02	0.00	0.00	4.17
19	0.05	0.12	0.42	0.78	0.84	0.91	0.66	0.26	0.07	0.04	0.00	0.00	0.00	0.00	4.17
20	0.06	0.08	0.39	0.95	1.00	0.87	0.49	0.24	0.07	0.01	0.00	0.00	0.00	0.00	4.17
21	0.04	0.12	0.44	0.73	1.10	0.99	0.39	0.23	0.08	0.03	0.01	0.00	0.00	0.00	4.17
22	0.05	0.09	0.36	0.78	1.11	0.99	0.47	0.22	0.06	0.01	0.02	0.00	0.00	0.00	4.17
23	0.05	0.10	0.30	0.70	1.34	0.84	0.55	0.16	0.04	0.06	0.02	0.00	0.00	0.00	4.17
24	0.03	0.05	0.23	0.71	1.43	0.91	0.50	0.20	0.04	0.04	0.02	0.00	0.00	0.00	4.17
TOTAL	0.80	1.25	4.72	12.83	25.85	25.30	17.33	7.72	2.60	0.85	0.41	0.24	0.09		

Table 541. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. September 1950-1964

NUMBER OF OBSERVATIONS 10800														
HOUR	MIDWAY MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													TOTAL
	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	
1	0.14	0.22	0.58	1.02	1.10	0.71	0.25	0.06	0.00	0.00	0.00	0.08	0.08	4.17
2	0.10	0.19	0.52	1.03	1.18	0.81	0.22	0.03	0.02	0.00	0.00	0.00	0.08	4.17
3	0.11	0.19	0.45	1.11	1.16	0.79	0.24	0.01	0.01	0.00	0.00	0.00	0.09	4.17
4	0.06	0.17	0.53	1.08	1.31	0.64	0.22	0.06	0.00	0.01	0.00	0.00	0.08	4.17
5	0.08	0.16	0.51	1.05	1.32	0.69	0.23	0.01	0.03	0.00	0.00	0.00	0.08	4.17
6	0.09	0.19	0.51	1.21	1.21	0.60	0.22	0.03	0.01	0.00	0.00	0.00	0.08	4.17
7	0.18	0.19	0.54	0.81	1.20	0.78	0.30	0.06	0.04	0.00	0.01	0.00	0.08	4.17
8	0.05	0.15	0.44	0.90	1.23	0.86	0.32	0.13	0.01	0.00	0.00	0.00	0.08	4.17
9	0.03	0.05	0.23	0.62	1.40	1.21	0.48	0.04	0.03	0.00	0.00	0.00	0.08	4.17
10	0.01	0.02	0.20	0.66	1.18	1.19	0.66	0.19	0.00	0.01	0.00	0.00	0.06	4.17
11	0.01	0.05	0.07	0.51	1.23	1.31	0.73	0.12	0.06	0.01	0.00	0.00	0.06	4.17
12	0.00	0.02	0.10	0.42	1.13	1.48	0.73	0.19	0.03	0.01	0.00	0.00	0.06	4.17
13	0.01	0.03	0.06	0.44	1.13	1.30	0.81	0.20	0.10	0.00	0.03	0.00	0.06	4.17
14	0.00	0.02	0.06	0.40	1.21	1.27	0.80	0.20	0.12	0.01	0.00	0.00	0.07	4.17
15	0.02	0.02	0.08	0.33	1.17	1.40	0.74	0.22	0.08	0.04	0.00	0.00	0.06	4.17
16	0.02	0.01	0.06	0.40	1.10	1.31	0.74	0.31	0.13	0.02	0.00	0.01	0.06	4.17
17	0.03	0.00	0.10	0.44	1.33	1.05	0.69	0.30	0.09	0.05	0.02	0.01	0.06	4.17
18	0.04	0.06	0.31	0.80	1.24	1.00	0.44	0.14	0.05	0.02	0.00	0.01	0.06	4.17
19	0.12	0.13	0.60	0.96	1.20	0.69	0.28	0.08	0.01	0.01	0.00	0.00	0.06	4.17
20	0.20	0.24	0.62	1.00	1.13	0.68	0.17	0.06	0.00	0.00	0.00	0.00	0.06	4.17
21	0.24	0.28	0.63	1.02	0.96	0.65	0.23	0.06	0.01	0.01	0.00	0.00	0.07	4.17
22	0.20	0.30	0.66	0.94	1.06	0.60	0.28	0.06	0.00	0.00	0.00	0.00	0.07	4.17
23	0.20	0.21	0.56	0.98	1.09	0.68	0.27	0.07	0.01	0.00	0.00	0.00	0.09	4.17
24	0.17	0.19	0.69	0.85	1.12	0.69	0.28	0.06	0.05	0.00	0.00	0.00	0.07	4.17
TOTAL	2.10	3.06	9.12	18.95	28.42	22.38	10.34	2.69	0.87	0.19	0.06	0.03	1.80	

NUMBER OF OBSERVATIONS 10800														
HOUR	HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													TOTAL
	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	
1	0.03	0.01	0.16	0.59	1.10	0.81	0.76	0.30	0.19	0.06	0.04	0.03	0.08	4.17
2	0.01	0.08	0.21	0.57	0.94	0.97	0.70	0.31	0.17	0.08	0.02	0.01	0.08	4.17
3	0.02	0.01	0.25	0.53	1.05	1.06	0.64	0.35	0.12	0.04	0.01	0.02	0.08	4.17
4	0.00	0.03	0.19	0.59	1.05	1.14	0.58	0.33	0.12	0.03	0.02	0.01	0.08	4.17
5	0.01	0.04	0.22	0.61	1.13	0.91	0.76	0.26	0.10	0.03	0.02	0.00	0.08	4.17
6	0.02	0.02	0.27	0.66	1.12	0.89	0.77	0.23	0.04	0.05	0.02	0.00	0.09	4.17
7	0.05	0.05	0.19	0.59	1.00	0.92	0.73	0.31	0.16	0.06	0.04	0.01	0.08	4.17
8	0.03	0.06	0.18	0.50	0.91	0.96	0.85	0.28	0.19	0.09	0.04	0.00	0.08	4.17
9	0.04	0.02	0.14	0.28	0.71	1.11	1.06	0.44	0.19	0.06	0.02	0.02	0.08	4.17
10	0.02	0.06	0.07	0.28	0.69	1.22	1.08	0.51	0.08	0.06	0.01	0.02	0.06	4.17
11	0.01	0.02	0.03	0.26	0.69	1.24	1.19	0.47	0.12	0.05	0.02	0.00	0.06	4.17
12	0.02	0.02	0.07	0.18	0.58	1.38	1.15	0.43	0.19	0.06	0.02	0.01	0.06	4.17
13	0.01	0.00	0.06	0.17	0.71	1.26	1.06	0.56	0.19	0.07	0.01	0.01	0.06	4.17
14	0.01	0.00	0.04	0.17	0.68	1.27	1.10	0.54	0.17	0.07	0.04	0.01	0.08	4.17
15	0.01	0.01	0.04	0.18	0.63	1.24	1.05	0.57	0.27	0.06	0.03	0.03	0.06	4.17
16	0.02	0.00	0.05	0.16	0.63	1.20	1.10	0.57	0.26	0.06	0.05	0.01	0.06	4.17
17	0.00	0.00	0.07	0.19	0.69	1.19	0.99	0.56	0.23	0.10	0.03	0.06	0.06	4.17
18	0.02	0.01	0.16	0.49	0.80	0.78	0.89	0.54	0.23	0.10	0.04	0.05	0.07	4.17
19	0.03	0.06	0.27	0.59	0.92	0.81	0.58	0.46	0.24	0.09	0.01	0.05	0.06	4.17
20	0.07	0.10	0.27	0.49	0.85	0.91	0.61	0.45	0.26	0.07	0.00	0.01	0.06	4.17
21	0.05	0.08	0.28	0.57	0.88	0.76	0.71	0.42	0.18	0.12	0.03	0.02	0.07	4.17
22	0.04	0.06	0.22	0.54	0.81	0.95	0.71	0.44	0.14	0.10	0.05	0.03	0.07	4.17
23	0.06	0.03	0.18	0.49	0.95	0.94	0.69	0.32	0.22	0.12	0.06	0.02	0.07	4.17
24	0.04	0.02	0.22	0.60	0.81	0.85	0.71	0.36	0.31	0.06	0.06	0.03	0.07	4.17
TOTAL	0.58	0.77	3.82	10.27	20.32	24.77	20.50	10.00	4.38	1.69	0.66	0.44	1.80	

Table 542. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. October 1950-1964

NUMBER OF OBSERVATIONS 11160

HOUR	MIDWAY MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													MISSING	TOTAL
	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25			
1	0.11	0.11	0.48	0.84	1.16	0.76	0.40	0.19	0.05	0.02	0.01	0.01	0.02	0.02	4.17
2	0.10	0.15	0.42	0.80	1.22	0.68	0.49	0.20	0.06	0.01	0.00	0.02	0.02	0.02	4.17
3	0.12	0.10	0.45	0.87	1.03	0.90	0.39	0.21	0.07	0.03	0.00	0.00	0.02	0.02	4.17
4	0.11	0.07	0.45	0.91	1.08	0.90	0.41	0.14	0.05	0.02	0.01	0.00	0.02	0.02	4.17
5	0.12	0.14	0.47	0.86	1.03	0.82	0.48	0.11	0.10	0.01	0.00	0.00	0.02	0.02	4.17
6	0.13	0.20	0.39	0.87	1.05	0.93	0.36	0.11	0.04	0.01	0.01	0.00	0.07	0.07	4.17
7	0.15	0.17	0.57	0.77	1.11	0.85	0.30	0.13	0.03	0.01	0.00	0.01	0.07	0.07	4.17
8	0.07	0.13	0.43	0.85	1.05	1.04	0.41	0.13	0.03	0.00	0.01	0.00	0.02	0.02	4.17
9	0.04	0.05	0.26	0.65	1.04	1.18	0.52	0.30	0.04	0.03	0.02	0.02	0.02	0.02	4.17
10	0.03	0.04	0.18	0.52	1.10	1.16	0.72	0.21	0.13	0.04	0.01	0.02	0.02	0.02	4.17
11	0.06	0.01	0.09	0.42	1.08	1.26	0.80	0.27	0.11	0.01	0.02	0.02	0.02	0.02	4.17
12	0.05	0.04	0.06	0.37	1.12	1.23	0.76	0.34	0.11	0.04	0.02	0.02	0.02	0.02	4.17
13	0.08	0.02	0.10	0.46	0.79	1.40	0.76	0.30	0.21	0.01	0.03	0.02	0.02	0.02	4.17
14	0.04	0.04	0.11	0.39	0.93	1.32	0.78	0.27	0.13	0.10	0.03	0.02	0.02	0.02	4.17
15	0.06	0.03	0.08	0.30	1.04	1.19	0.80	0.40	0.13	0.09	0.01	0.02	0.02	0.02	4.17
16	0.08	0.01	0.05	0.35	0.83	1.42	0.63	0.46	0.22	0.05	0.03	0.03	0.01	0.01	4.17
17	0.08	0.04	0.05	0.43	0.91	1.23	0.72	0.38	0.13	0.08	0.00	0.04	0.09	0.17	4.17
18	0.10	0.09	0.24	0.60	1.10	0.91	0.33	0.25	0.08	0.05	0.00	0.03	0.08	0.17	4.17
19	0.15	0.15	0.24	0.77	0.96	0.95	0.57	0.18	0.13	0.03	0.00	0.02	0.01	0.17	4.17
20	0.18	0.13	0.36	0.69	1.03	0.82	0.65	0.22	0.02	0.04	0.00	0.03	0.01	0.01	4.17
21	0.13	0.18	0.46	0.81	0.96	0.80	0.56	0.20	0.03	0.03	0.00	0.02	0.01	0.01	4.17
22	0.14	0.21	0.48	0.70	1.16	0.70	0.47	0.21	0.06	0.01	0.02	0.00	0.01	0.01	4.17
23	0.16	0.22	0.39	0.80	1.13	0.65	0.54	0.19	0.07	0.02	0.00	0.00	0.01	0.01	4.17
24	0.12	0.20	0.47	0.74	1.08	0.76	0.49	0.20	0.07	0.01	0.00	0.02	0.01	0.01	4.17
TOTAL	2.41	2.51	7.29	15.76	25.00	23.86	13.63	5.56	2.11	0.73	0.19	0.34	0.61		

NUMBER OF OBSERVATIONS 11160

HOUR	O'HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													MISSING	TOTAL
	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25			
1	0.04	0.04	0.15	0.41	0.99	0.93	0.71	0.39	0.30	0.12	0.04	0.04	0.02	0.02	4.17
2	0.05	0.04	0.19	0.36	0.85	1.06	0.69	0.40	0.27	0.14	0.07	0.03	0.02	0.02	4.17
3	0.07	0.01	0.21	0.41	0.86	1.10	0.63	0.43	0.20	0.11	0.09	0.04	0.02	0.02	4.17
4	0.04	0.04	0.22	0.46	0.91	1.15	0.55	0.44	0.19	0.08	0.04	0.03	0.02	0.02	4.17
5	0.08	0.06	0.19	0.50	0.94	1.08	0.58	0.37	0.22	0.08	0.03	0.03	0.02	0.02	4.17
6	0.05	0.05	0.21	0.56	0.96	1.03	0.62	0.30	0.19	0.08	0.07	0.02	0.02	0.02	4.17
7	0.03	0.04	0.16	0.57	0.99	1.10	0.73	0.21	0.21	0.03	0.04	0.03	0.02	0.02	4.17
8	0.04	0.07	0.13	0.39	0.96	1.18	0.77	0.26	0.19	0.07	0.06	0.02	0.02	0.02	4.17
9	0.04	0.04	0.06	0.19	0.81	1.18	0.99	0.46	0.19	0.11	0.06	0.04	0.02	0.02	4.17
10	0.03	0.03	0.04	0.19	0.56	1.33	1.02	0.58	0.22	0.11	0.03	0.02	0.02	0.02	4.17
11	0.03	0.03	0.06	0.12	0.48	1.38	1.09	0.53	0.29	0.07	0.04	0.03	0.02	0.02	4.17
12	0.06	0.02	0.02	0.12	0.49	1.22	1.24	0.61	0.27	0.06	0.02	0.03	0.02	0.02	4.17
13	0.05	0.01	0.07	0.09	0.56	1.15	1.15	0.67	0.22	0.11	0.03	0.04	0.02	0.02	4.17
14	0.03	0.02	0.07	0.12	0.45	1.32	1.08	0.55	0.35	0.08	0.05	0.04	0.02	0.02	4.17
15	0.04	0.01	0.04	0.13	0.56	1.10	1.23	0.54	0.30	0.14	0.02	0.04	0.02	0.02	4.17
16	0.04	0.02	0.05	0.11	0.45	1.09	1.20	0.64	0.30	0.13	0.04	0.08	0.01	0.01	4.17
17	0.05	0.01	0.04	0.18	0.48	0.97	1.08	0.72	0.30	0.19	0.11	0.03	0.02	0.02	4.17
18	0.04	0.05	0.07	0.23	0.71	0.86	0.87	0.75	0.33	0.13	0.04	0.05	0.01	0.01	4.17
19	0.05	0.08	0.13	0.33	0.73	0.91	0.74	0.62	0.29	0.13	0.10	0.04	0.01	0.01	4.17
20	0.04	0.04	0.22	0.39	0.65	0.84	0.94	0.48	0.30	0.12	0.08	0.05	0.01	0.01	4.17
21	0.06	0.08	0.13	0.32	0.77	1.11	0.67	0.48	0.30	0.14	0.04	0.04	0.01	0.01	4.17
22	0.04	0.10	0.13	0.34	0.87	0.94	0.66	0.55	0.28	0.17	0.03	0.05	0.01	0.01	4.17
23	0.04	0.08	0.13	0.39	0.82	0.92	0.83	0.39	0.23	0.18	0.07	0.06	0.01	0.01	4.17
24	0.03	0.07	0.15	0.34	0.82	1.08	0.81	0.31	0.26	0.15	0.09	0.04	0.01	0.01	4.17
TOTAL	1.09	1.04	2.89	7.25	17.68	26.03	20.88	11.68	6.16	2.73	1.32	0.91	0.36		

Table 543. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. November 1950-1964

NUMBER OF OBSERVATIONS 10800

HOUR	MIDWAY MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													MISSING	TOTAL
	≤-26	-25	-20	-15	-10	-5	0	5	10	15	20	-24			
1	0.10	0.11	0.38	0.83	1.13	0.97	0.50	0.11	0.03	0.00	0.00	0.00	0.00	0.00	4.17
2	0.14	0.15	0.29	0.77	1.19	0.99	0.47	0.11	0.03	0.03	0.00	0.00	0.00	0.00	4.17
3	0.08	0.16	0.39	0.84	1.17	0.98	0.39	0.13	0.01	0.01	0.01	0.00	0.00	0.00	4.17
4	0.12	0.21	0.27	0.74	1.28	0.94	0.51	0.07	0.03	0.00	0.00	0.00	0.00	0.00	4.17
5	0.10	0.10	0.44	0.72	1.31	0.93	0.43	0.07	0.04	0.00	0.00	0.00	0.00	0.00	4.17
6	0.06	0.13	0.41	0.84	1.24	1.02	0.33	0.10	0.03	0.00	0.00	0.00	0.00	0.00	4.17
7	0.10	0.20	0.42	0.91	1.19	0.91	0.33	0.09	0.02	0.00	0.00	0.00	0.00	0.00	4.17
8	0.14	0.21	0.49	0.89	1.08	0.90	0.35	0.06	0.04	0.00	0.00	0.00	0.00	0.00	4.17
9	0.06	0.18	0.37	0.73	1.04	1.10	0.51	0.16	0.02	0.01	0.00	0.00	0.00	0.00	4.17
10	0.03	0.08	0.26	0.67	1.06	1.23	0.57	0.17	0.08	0.00	0.00	0.00	0.00	0.01	4.17
11	0.01	0.03	0.16	0.60	0.91	1.41	0.68	0.29	0.06	0.01	0.01	0.00	0.01	0.01	4.17
12	0.03	0.02	0.10	0.53	0.95	1.34	0.79	0.25	0.11	0.03	0.01	0.00	0.01	0.01	4.17
13	0.01	0.03	0.06	0.41	1.00	1.37	0.81	0.39	0.06	0.01	0.02	0.00	0.01	0.01	4.17
14	0.02	0.03	0.08	0.44	1.06	1.18	0.97	0.29	0.06	0.01	0.01	0.00	0.01	0.01	4.17
15	0.03	0.00	0.12	0.36	0.98	1.40	0.73	0.41	0.10	0.03	0.01	0.00	0.00	0.00	4.17
16	0.02	0.03	0.08	0.42	0.95	1.32	0.78	0.37	0.13	0.06	0.00	0.00	0.00	0.00	4.17
17	0.02	0.03	0.17	0.55	1.12	1.24	0.72	0.19	0.12	0.01	0.00	0.00	0.00	0.00	4.17
18	0.05	0.05	0.23	0.70	1.17	1.16	0.60	0.15	0.03	0.04	0.00	0.00	0.00	0.00	4.17
19	0.08	0.10	0.40	0.69	1.19	1.00	0.52	0.09	0.09	0.00	0.00	0.00	0.00	0.00	4.17
20	0.07	0.11	0.31	0.82	1.11	1.05	0.51	0.15	0.03	0.00	0.00	0.00	0.00	0.00	4.17
21	0.09	0.08	0.38	0.79	1.22	0.85	0.57	0.13	0.05	0.00	0.00	0.00	0.00	0.00	4.17
22	0.10	0.14	0.33	0.65	1.23	0.94	0.62	0.10	0.04	0.01	0.00	0.00	0.00	0.00	4.17
23	0.19	0.09	0.34	0.64	1.21	1.12	0.44	0.12	0.02	0.00	0.00	0.00	0.00	0.00	4.17
24	0.12	0.18	0.37	0.61	1.26	0.94	0.56	0.10	0.02	0.01	0.00	0.00	0.00	0.00	4.17
TOTAL	1.77	2.44	6.86	16.16	27.06	26.31	13.69	4.11	1.23	0.26	0.06	0.00	0.05		

NUMBER OF OBSERVATIONS 10800

HOUR	U' HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													MISSING	TOTAL
	≤-26	-25	-20	-15	-10	-5	0	5	10	15	20	-24			
1	0.06	0.08	0.19	0.56	0.79	0.92	0.91	0.34	0.19	0.08	0.04	0.00	0.01	0.01	4.17
2	0.09	0.06	0.25	0.42	0.85	1.08	0.76	0.41	0.17	0.04	0.04	0.01	0.00	0.00	4.17
3	0.12	0.09	0.20	0.45	0.92	1.02	0.66	0.47	0.18	0.04	0.01	0.00	0.01	0.01	4.17
4	0.10	0.04	0.19	0.55	0.99	0.96	0.76	0.32	0.16	0.06	0.01	0.00	0.02	0.01	4.17
5	0.08	0.06	0.23	0.51	0.98	0.98	0.71	0.35	0.16	0.07	0.01	0.00	0.01	0.01	4.17
6	0.09	0.08	0.22	0.51	0.94	1.06	0.69	0.35	0.09	0.08	0.03	0.01	0.01	0.01	4.17
7	0.10	0.09	0.22	0.61	0.84	1.07	0.57	0.29	0.21	0.09	0.04	0.01	0.01	0.01	4.17
8	0.13	0.08	0.24	0.59	0.90	0.98	0.60	0.39	0.15	0.06	0.02	0.01	0.01	0.01	4.17
9	0.05	0.05	0.18	0.45	0.94	0.92	0.90	0.44	0.18	0.06	0.01	0.01	0.00	0.00	4.17
10	0.03	0.06	0.12	0.31	0.72	1.05	0.95	0.45	0.29	0.08	0.04	0.05	0.01	0.01	4.17
11	0.04	0.05	0.08	0.30	0.56	1.21	0.85	0.61	0.28	0.15	0.01	0.03	0.01	0.01	4.17
12	0.03	0.05	0.10	0.11	0.46	1.10	1.13	0.67	0.27	0.12	0.08	0.04	0.01	0.01	4.17
13	0.02	0.01	0.07	0.14	0.63	1.11	1.05	0.56	0.37	0.13	0.06	0.01	0.01	0.01	4.17
14	0.02	0.01	0.06	0.25	0.54	1.06	1.06	0.69	0.31	0.09	0.04	0.03	0.01	0.01	4.17
15	0.02	0.01	0.06	0.19	0.55	1.12	0.93	0.79	0.35	0.07	0.05	0.04	0.00	0.00	4.17
16	0.03	0.01	0.08	0.11	0.51	1.02	1.19	0.55	0.44	0.14	0.06	0.04	0.00	0.00	4.17
17	0.04	0.04	0.09	0.22	0.54	1.05	1.00	0.59	0.37	0.17	0.06	0.01	0.00	0.00	4.17
18	0.02	0.03	0.15	0.31	0.70	1.06	0.86	0.54	0.26	0.18	0.06	0.02	0.00	0.00	4.17
19	0.03	0.03	0.11	0.43	0.75	1.06	0.81	0.36	0.35	0.14	0.08	0.03	0.00	0.00	4.17
20	0.03	0.06	0.08	0.44	0.82	0.95	0.83	0.46	0.32	0.06	0.08	0.02	0.00	0.00	4.17
21	0.05	0.04	0.17	0.43	0.78	1.02	0.81	0.35	0.28	0.16	0.08	0.02	0.00	0.00	4.17
22	0.05	0.05	0.18	0.44	0.75	1.07	0.69	0.47	0.28	0.12	0.06	0.02	0.00	0.00	4.17
23	0.06	0.04	0.24	0.36	0.94	0.94	0.86	0.34	0.24	0.07	0.06	0.01	0.00	0.00	4.17
24	0.08	0.07	0.22	0.47	0.81	0.96	0.72	0.44	0.25	0.06	0.05	0.02	0.01	0.01	4.17
TOTAL	1.35	1.18	3.76	9.16	18.19	24.77	20.29	11.26	6.14	2.33	1.05	0.41	0.13		

Table 544. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. December 1950-1964

HOUR	MIDWAY MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													TOTAL
	≤ -26	-21	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	
1	0.26	0.25	0.41	0.85	1.16	0.75	0.25	0.14	0.04	0.01	0.00	0.00	0.04	4.17
2	0.23	0.25	0.39	0.85	1.06	0.85	0.32	0.13	0.03	0.01	0.00	0.00	0.04	4.17
3	0.31	0.21	0.48	0.74	1.03	0.84	0.39	0.08	0.03	0.01	0.00	0.00	0.04	4.17
4	0.27	0.20	0.40	0.74	1.12	0.95	0.36	0.05	0.04	0.00	0.00	0.00	0.04	4.17
5	0.28	0.22	0.48	0.70	1.06	0.87	0.41	0.08	0.02	0.01	0.00	0.00	0.04	4.17
6	0.22	0.15	0.47	0.82	1.08	0.93	0.36	0.05	0.03	0.00	0.00	0.00	0.04	4.17
7	0.23	0.20	0.47	0.76	1.20	0.86	0.30	0.08	0.00	0.01	0.00	0.00	0.04	4.17
8	0.35	0.22	0.43	0.75	1.09	0.91	0.30	0.04	0.04	0.00	0.00	0.00	0.04	4.17
9	0.21	0.20	0.48	0.63	1.13	0.99	0.36	0.09	0.02	0.02	0.00	0.00	0.04	4.17
10	0.16	0.12	0.35	0.72	1.10	0.93	0.56	0.13	0.06	0.01	0.00	0.00	0.03	4.17
11	0.09	0.16	0.30	0.51	1.12	1.06	0.65	0.18	0.04	0.02	0.01	0.00	0.03	4.17
12	0.03	0.07	0.29	0.49	1.03	1.16	0.65	0.30	0.07	0.04	0.01	0.00	0.04	4.17
13	0.09	0.04	0.19	0.47	1.07	1.00	0.83	0.27	0.14	0.01	0.01	0.00	0.04	4.17
14	0.02	0.08	0.18	0.42	1.04	1.21	0.80	0.26	0.09	0.03	0.02	0.00	0.03	4.17
15	0.04	0.05	0.22	0.51	1.13	1.00	0.73	0.32	0.11	0.01	0.00	0.00	0.03	4.17
16	0.05	0.06	0.22	0.58	1.15	1.08	0.56	0.27	0.14	0.01	0.01	0.00	0.03	4.17
17	0.08	0.13	0.32	0.72	1.08	1.01	0.61	0.12	0.05	0.03	0.00	0.00	0.03	4.17
18	0.13	0.14	0.36	0.70	1.31	0.89	0.48	0.08	0.04	0.02	0.00	0.00	0.03	4.17
19	0.21	0.13	0.43	0.67	1.23	0.96	0.35	0.13	0.04	0.01	0.00	0.00	0.03	4.17
20	0.22	0.11	0.39	0.77	1.19	1.00	0.31	0.13	0.01	0.00	0.00	0.00	0.03	4.17
21	0.26	0.22	0.41	0.68	1.29	0.83	0.31	0.12	0.01	0.01	0.00	0.00	0.03	4.17
22	0.23	0.26	0.40	0.79	1.11	0.85	0.33	0.12	0.04	0.00	0.00	0.00	0.04	4.17
23	0.29	0.22	0.42	0.79	0.99	0.97	0.31	0.13	0.03	0.00	0.00	0.00	0.03	4.17
24	0.27	0.25	0.39	0.80	1.00	0.97	0.30	0.12	0.02	0.00	0.00	0.01	0.04	4.17
TOTAL	4.53	3.92	8.92	16.48	26.77	22.89	10.85	3.42	1.11	0.24	0.05	0.01	0.81	

HOUR	O'HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													TOTAL
	≤ -26	-21	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	
1	0.29	0.15	0.35	0.56	0.98	0.86	0.48	0.28	0.12	0.05	0.00	0.01	0.04	4.17
2	0.30	0.19	0.35	0.63	0.95	0.70	0.62	0.27	0.09	0.04	0.00	0.01	0.04	4.17
3	0.34	0.19	0.40	0.56	0.91	0.91	0.54	0.13	0.12	0.03	0.02	0.00	0.04	4.17
4	0.26	0.17	0.45	0.67	0.89	0.88	0.51	0.17	0.09	0.03	0.01	0.01	0.04	4.17
5	0.30	0.17	0.45	0.61	0.88	0.91	0.44	0.23	0.10	0.02	0.02	0.00	0.04	4.17
6	0.28	0.28	0.43	0.60	0.84	0.91	0.50	0.19	0.05	0.03	0.01	0.00	0.04	4.17
7	0.27	0.29	0.41	0.59	0.84	0.88	0.49	0.22	0.07	0.02	0.03	0.02	0.04	4.17
8	0.20	0.22	0.44	0.77	0.82	0.86	0.41	0.24	0.12	0.02	0.01	0.01	0.04	4.17
9	0.20	0.13	0.49	0.59	0.73	0.86	0.69	0.29	0.07	0.04	0.02	0.01	0.04	4.17
10	0.13	0.10	0.35	0.55	0.64	0.94	0.76	0.42	0.14	0.07	0.02	0.02	0.03	4.17
11	0.04	0.04	0.23	0.47	0.74	1.05	0.67	0.53	0.21	0.11	0.02	0.03	0.03	4.17
12	0.04	0.07	0.13	0.40	0.88	0.89	0.76	0.52	0.28	0.11	0.05	0.01	0.04	4.17
13	0.04	0.04	0.18	0.40	0.56	1.06	0.89	0.53	0.24	0.08	0.08	0.03	0.04	4.17
14	0.07	0.06	0.10	0.38	0.67	0.95	0.82	0.56	0.28	0.19	0.05	0.00	0.03	4.17
15	0.04	0.07	0.17	0.34	0.73	0.98	0.77	0.60	0.30	0.09	0.02	0.02	0.03	4.17
16	0.06	0.05	0.17	0.41	0.82	0.98	0.71	0.52	0.26	0.08	0.04	0.02	0.04	4.17
17	0.06	0.09	0.24	0.51	0.82	1.05	0.74	0.35	0.18	0.05	0.04	0.01	0.03	4.17
18	0.09	0.07	0.31	0.65	0.84	1.00	0.63	0.31	0.13	0.04	0.04	0.02	0.03	4.17
19	0.13	0.10	0.38	0.61	0.94	0.79	0.67	0.39	0.09	0.02	0.02	0.01	0.03	4.17
20	0.11	0.20	0.42	0.45	0.91	0.98	0.64	0.27	0.11	0.04	0.03	0.00	0.03	4.17
21	0.14	0.21	0.38	0.53	1.00	0.83	0.60	0.25	0.13	0.05	0.00	0.01	0.03	4.17
22	0.22	0.14	0.33	0.59	1.05	0.77	0.58	0.29	0.13	0.03	0.00	0.01	0.03	4.17
23	0.19	0.19	0.38	0.59	0.99	0.83	0.50	0.30	0.06	0.04	0.02	0.04	0.04	4.17
24	0.22	0.20	0.37	0.66	0.92	0.88	0.47	0.23	0.13	0.03	0.03	0.01	0.04	4.17
TOTAL	4.01	3.43	7.90	13.13	20.35	21.73	14.90	8.10	3.50	1.29	0.56	0.28	0.82	

Table 545. Percentage Frequency Distribution of the Difference in Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. January 1950–December 1964

NUMBER OF OBSERVATIONS 131497

HOUR	MIDWAY MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													TOTAL
	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	
1	0.19	0.21	0.55	0.92	1.08	0.74	0.30	0.10	0.03	0.00	0.00	0.00	0.04	4.17
2	0.17	0.22	0.51	0.90	1.14	0.76	0.30	0.09	0.03	0.01	0.00	0.00	0.04	4.17
3	0.16	0.19	0.53	0.91	1.13	0.80	0.29	0.08	0.02	0.01	0.00	0.00	0.05	4.17
4	0.16	0.18	0.50	0.92	1.14	0.81	0.30	0.08	0.02	0.01	0.00	0.00	0.04	4.17
5	0.15	0.20	0.52	0.89	1.16	0.77	0.32	0.08	0.03	0.01	0.00	0.00	0.04	4.17
6	0.14	0.21	0.50	0.94	1.18	0.78	0.28	0.07	0.02	0.00	0.00	0.00	0.05	4.17
7	0.16	0.19	0.47	0.90	1.19	0.81	0.30	0.09	0.02	0.00	0.00	0.00	0.05	4.17
8	0.15	0.15	0.43	0.88	1.20	0.85	0.34	0.09	0.02	0.00	0.00	0.00	0.04	4.17
9	0.09	0.11	0.32	0.77	1.21	1.01	0.43	0.13	0.03	0.01	0.00	0.00	0.04	4.17
10	0.07	0.07	0.28	0.73	1.20	1.00	0.54	0.17	0.05	0.01	0.00	0.00	0.04	4.17
11	0.05	0.05	0.21	0.67	1.14	1.10	0.61	0.21	0.06	0.02	0.01	0.00	0.04	4.17
12	0.04	0.06	0.18	0.59	1.16	1.12	0.62	0.23	0.09	0.02	0.01	0.00	0.04	4.17
13	0.04	0.05	0.18	0.56	1.10	1.12	0.66	0.28	0.10	0.02	0.01	0.00	0.05	4.17
14	0.04	0.05	0.17	0.57	1.09	1.12	0.67	0.26	0.10	0.03	0.01	0.00	0.05	4.17
15	0.04	0.05	0.17	0.55	1.13	1.12	0.63	0.28	0.11	0.04	0.01	0.00	0.04	4.17
16	0.04	0.05	0.16	0.57	1.10	1.11	0.61	0.28	0.13	0.04	0.01	0.01	0.04	4.17
17	0.04	0.06	0.21	0.61	1.18	1.05	0.59	0.24	0.08	0.04	0.00	0.01	0.05	4.17
18	0.07	0.09	0.29	0.75	1.23	0.95	0.46	0.17	0.06	0.03	0.00	0.01	0.05	4.17
19	0.11	0.13	0.44	0.86	1.17	0.84	0.39	0.12	0.04	0.01	0.01	0.00	0.04	4.17
20	0.15	0.17	0.51	0.89	1.11	0.81	0.34	0.12	0.02	0.01	0.00	0.00	0.04	4.17
21	0.18	0.23	0.55	0.92	1.05	0.73	0.32	0.10	0.02	0.01	0.00	0.00	0.04	4.17
22	0.21	0.24	0.55	0.90	1.07	0.69	0.34	0.09	0.03	0.00	0.00	0.00	0.04	4.17
23	0.21	0.25	0.55	0.88	1.06	0.74	0.30	0.09	0.02	0.01	0.00	0.00	0.04	4.17
24	0.19	0.26	0.55	0.86	1.09	0.73	0.33	0.08	0.02	0.01	0.00	0.00	0.04	4.17
TOTAL	2.87	3.46	9.35	18.94	27.28	21.57	10.26	3.53	1.16	0.34	0.11	0.07	1.06	

NUMBER OF OBSERVATIONS 131497

HOUR	O'HARE MINUS ARGONNE RELATIVE HUMIDITY (PERCENT)													TOTAL
	≤ -26	-25	-20	-15	-10	-5	0	5	10	15	20	≥ 25	MISSING	
1	0.11	0.09	0.28	0.60	0.98	0.95	0.62	0.27	0.14	0.06	0.02	0.01	0.04	4.17
2	0.11	0.11	0.28	0.59	0.96	0.97	0.61	0.27	0.12	0.06	0.03	0.01	0.04	4.17
3	0.12	0.10	0.29	0.57	1.02	1.00	0.57	0.27	0.12	0.05	0.02	0.01	0.04	4.17
4	0.11	0.09	0.30	0.59	1.03	1.00	0.56	0.27	0.11	0.04	0.02	0.01	0.04	4.17
5	0.11	0.09	0.30	0.62	1.04	0.98	0.57	0.23	0.11	0.04	0.01	0.01	0.04	4.17
6	0.11	0.11	0.31	0.63	1.00	0.96	0.60	0.24	0.09	0.05	0.02	0.01	0.04	4.17
7	0.12	0.10	0.26	0.59	0.94	0.98	0.65	0.26	0.13	0.04	0.03	0.01	0.04	4.17
8	0.10	0.09	0.23	0.53	0.91	1.00	0.71	0.31	0.15	0.06	0.02	0.01	0.04	4.17
9	0.07	0.07	0.19	0.40	0.80	1.04	0.85	0.41	0.18	0.07	0.03	0.02	0.04	4.17
10	0.05	0.06	0.14	0.36	0.73	1.07	0.90	0.47	0.19	0.08	0.04	0.02	0.04	4.17
11	0.04	0.03	0.12	0.34	0.69	1.05	0.95	0.53	0.22	0.09	0.04	0.03	0.04	4.17
12	0.03	0.04	0.11	0.31	0.64	1.06	0.97	0.53	0.26	0.11	0.05	0.03	0.04	4.17
13	0.04	0.03	0.12	0.26	0.66	1.05	0.96	0.55	0.24	0.13	0.06	0.03	0.04	4.17
14	0.04	0.03	0.10	0.29	0.64	1.06	0.94	0.55	0.26	0.12	0.06	0.03	0.04	4.17
15	0.04	0.03	0.10	0.27	0.67	1.03	0.95	0.56	0.27	0.11	0.05	0.04	0.04	4.17
16	0.04	0.03	0.12	0.28	0.66	1.03	0.95	0.54	0.26	0.11	0.05	0.05	0.04	4.17
17	0.04	0.04	0.13	0.31	0.72	1.04	0.91	0.52	0.22	0.11	0.06	0.03	0.04	4.17
18	0.06	0.04	0.17	0.44	0.80	0.99	0.79	0.43	0.22	0.11	0.04	0.03	0.04	4.17
19	0.06	0.09	0.24	0.53	0.84	0.95	0.71	0.37	0.20	0.08	0.03	0.03	0.04	4.17
20	0.08	0.11	0.27	0.57	0.88	0.90	0.65	0.37	0.18	0.06	0.03	0.02	0.04	4.17
21	0.09	0.12	0.29	0.58	0.90	0.91	0.62	0.32	0.16	0.07	0.03	0.02	0.04	4.17
22	0.11	0.11	0.28	0.60	0.89	0.95	0.59	0.33	0.15	0.07	0.03	0.02	0.04	4.17
23	0.10	0.12	0.31	0.56	0.93	0.93	0.63	0.29	0.15	0.07	0.03	0.02	0.04	4.17
24	0.12	0.11	0.28	0.56	0.95	0.96	0.61	0.27	0.15	0.06	0.03	0.02	0.04	4.17
TOTAL	1.92	1.86	5.23	11.38	20.28	23.87	17.85	9.15	4.27	1.86	0.84	0.47	1.02	

Table 546. Monthly Average Relative Humidity in Percent at
Midway Airport and Argonne Meteorology Site.
January 1950–December 1964

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	MIDWAY	75	77	70	69	59	65	65	69	74	66	70	77
	ARGONNE	78	80	75	77	61	69	70	76	80	72	75	81
	DIFFERENCE	-3	-3	-5	-8	-2	-4	-5	-7	-6	-6	-5	-4
1951	MIDWAY	74	76	68	69	64	67	68	75	68	72	70	72
	ARGONNE	81	83	74	77	72	76	76	82	76	80	76	82
	DIFFERENCE	-7	-7	-6	-8	-8	-9	-8	-7	-8	-8	-6	-10
1952	MIDWAY	75	70	70	59	65	67	66	69	67	52	64	79
	ARGONNE	82	79	78	61	70	76	75	76	72	55	70	85
	DIFFERENCE	-7	-9	-8	-2	-5	-9	-9	-7	-5	-3	-6	-6
1953	MIDWAY	78	68	71	64	66	64	63	60	53	58	62	69
	ARGONNE	88	77	79	69	73	76	74	70	64	66	67	82
	DIFFERENCE	-10	-9	-8	-5	-7	-12	-11	-10	-11	-8	-5	-13
1954	MIDWAY	68	65	62	64	55	63	63	69	62	70	71	73
	ARGONNE	81	74	68	75	65	73	73	80	72	77	82	87
	DIFFERENCE	-13	-9	-6	-11	-10	-10	-10	-11	-10	-7	-11	-14
1955	MIDWAY	67	70	61	57	55	60	64	58	58	68	71	69
	ARGONNE	82	85	72	67	66	70	75	70	67	79	81	79
	DIFFERENCE	-15	-15	-11	-10	-11	-10	-11	-12	-9	-11	-10	-10
1956	MIDWAY	72	76	66	57	63	59	64	67	57	58	68	81
	ARGONNE	81	83	71	67	72	68	76	78	67	64	74	85
	DIFFERENCE	-9	-7	-5	-10	-9	-9	-12	-11	-10	-6	-6	-4
1957	MIDWAY	75	74	64	72	68	67	66	71	68	68	71	73
	ARGONNE	75	77	69	76	73	73	73	78	76	72	75	79
	DIFFERENCE	0	-3	-5	-4	-5	-6	-7	-7	-8	-4	-4	-6
1958	MIDWAY	78	72	68	58	49	65	70	67	67	62	67	75
	ARGONNE	83	75	79	66	57	75	80	78	76	71	74	83
	DIFFERENCE	-5	-3	-11	-8	-8	-10	-10	-11	-9	-9	-7	-8
1959	MIDWAY	77	77	69	60	66	56	64	71	63	74	71	79
	ARGONNE	79	78	75	66	77	68	72	83	71	81	78	86
	DIFFERENCE	-2	-1	-6	-6	-11	-12	-8	-12	-8	-7	-7	-7
1960	MIDWAY	79	79	73	62	66	64	62	69	69	66	71	69
	ARGONNE	86	84	81	73	78	74	66	80	78	71	78	79
	DIFFERENCE	-7	-5	-8	-11	-12	-10	-4	-11	-9	-5	-7	-1
1961	MIDWAY	70	75	71	68	56	56	66	69	69	69	71	74
	ARGONNE	76	80	79	72	63	66	75	79	74	79	77	79
	DIFFERENCE	-6	-5	-8	-4	-7	-10	-9	-10	-5	-10	-6	-5
1962	MIDWAY	73	75	72	56	61	62	67	63	61	67	68	66
	ARGONNE	91	88	83	65	74	73	78	73	71	75	76	79
	DIFFERENCE	-18	-13	-11	-9	-13	-11	-11	-10	-5	-8	-8	-13
1963	MIDWAY	69	65	71	56	58	56	61	70	71	61	70	71
	ARGONNE	84	77	78	61	66	67	67	77	76	63	73	84
	DIFFERENCE	-15	-12	-7	-5	-8	-11	-6	-7	-5	-2	-3	-13
1964	MIDWAY	70	67	65	65	55	61	66	63	67	62	67	78
	ARGONNE	77	76	76	72	66	69	76	70	72	63	73	87
	DIFFERENCE	-7	-9	-11	-7	-11	-8	-10	-7	-5	-1	-6	-9

Table 547. Monthly Average Relative Humidity in Percent at O'Hare
 International Airport and Argonne Meteorology Site.
 January 1950-December 1964

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	O'HARE	79	78	76	75	63	70	69	74	78	73	72	78
	ARGONNE	78	80	75	77	61	69	70	76	80	72	75	81
	DIFFERENCE	1	-2	1	-2	2	1	-1	-2	-2	1	-3	-3
1951	O'HARE	80	80	74	76	70	72	75	78	72	80	77	79
	ARGONNE	81	83	74	77	72	76	76	82	76	80	76	82
	DIFFERENCE	-1	-3	0	-1	-2	-4	-1	-4	-4	0	1	-3
1952	O'HARE	81	76	75	63	68	71	70	73	69	55	49	83
	ARGONNE	82	79	78	61	70	76	75	76	72	55	70	85
	DIFFERENCE	-1	-3	-3	2	-2	-5	-5	-3	-3	0	-1	-2
1953	O'HARE	82	72	76	69	70	69	68	68	63	66	69	75
	ARGONNE	88	77	79	69	73	76	74	70	64	66	67	82
	DIFFERENCE	-6	-5	-3	0	-3	-7	-6	-2	-1	0	2	-7
1954	O'HARE	75	74	68	70	63	70	70	77	72	78	80	79
	ARGONNE	81	74	68	75	65	73	73	80	72	77	82	87
	DIFFERENCE	-6	0	0	-5	-2	-3	-3	-3	0	1	-2	-8
1955	O'HARE	73	75	67	66	65	70	73	65	65	76	75	69
	ARGONNE	82	85	72	67	66	70	75	70	67	79	81	79
	DIFFERENCE	-9	-10	-5	-1	-1	0	-2	-5	-2	-3	-6	-10
1956	O'HARE	70	75	70	62	69	63	69	72	61	61	67	71
	ARGONNE	81	83	71	67	72	68	76	78	67	64	74	85
	DIFFERENCE	-11	-8	-1	-5	-3	-5	-7	-6	-6	-3	-7	-14
1957	O'HARE	65	79	66	73	72	72	72	76	72	72	74	77
	ARGONNE	75	77	69	76	73	73	73	78	76	72	75	79
	DIFFERENCE	-10	2	-3	-3	-1	-1	-1	-2	-4	0	-1	-2
1958	O'HARE	77	66	75	66	57	74	77	74	72	67	69	73
	ARGONNE	83	75	79	66	57	75	80	78	76	71	74	83
	DIFFERENCE	-6	-9	-4	0	0	-1	-3	-4	-4	-4	-5	-10
1959	O'HARE	74	76	72	64	68	61	68	76	68	76	73	81
	ARGONNE	79	78	75	66	77	68	72	83	71	81	78	86
	DIFFERENCE	-5	-2	-3	-2	-9	-7	-4	-7	-3	-5	-5	-5
1960	O'HARE	79	78	74	67	69	67	68	74	74	70	73	71
	ARGONNE	86	84	81	73	78	74	66	80	78	71	78	70
	DIFFERENCE	-7	-6	-7	-6	-9	-7	2	-6	-4	-1	-5	1
1961	O'HARE	75	84	79	70	60	63	73	74	77	75	75	76
	ARGONNE	76	80	79	72	63	66	75	79	74	79	77	79
	DIFFERENCE	-1	4	0	-2	-3	-3	-2	-5	3	-4	-2	-3
1962	O'HARE	76	80	78	59	67	68	73	69	69	70	73	70
	ARGONNE	91	88	83	65	74	73	78	73	71	75	76	79
	DIFFERENCE	-15	-8	-5	-6	-7	-5	-5	-4	-2	-5	-3	-9
1963	O'HARE	67	64	70	55	56	60	61	70	68	62	77	77
	ARGONNE	84	77	78	61	66	67	67	77	76	63	73	84
	DIFFERENCE	-17	-13	-8	-6	-10	-7	-6	-7	-8	-1	4	-7
1964	O'HARE	72	70	68	69	65	69	74	68	73	67	76	82
	ARGONNE	77	76	76	72	66	69	76	70	72	63	73	87
	DIFFERENCE	-5	-6	-8	-3	-1	0	-2	-2	1	4	3	-5

Table 548. Percentage Frequency Distribution of the Difference in the Daily Maximum Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site. January 1950–December 1964

NUMBER OF OBSERVATIONS 5479														
		MONTH												
MIDWAY	MINUS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ARGONNE														
-30– -26	0.16	0.07	0.04	0.02	0.04	0.02	0.00	0.00	0.00	0.07	0.02	0.13	0.57	
-25– -21	0.37	0.27	0.11	0.13	0.11	0.09	0.00	0.04	0.00	0.05	0.07	0.31	1.55	
-20– -16	0.47	0.27	0.33	0.46	0.57	0.53	0.18	0.07	0.05	0.13	0.20	0.53	3.80	
-15– -11	1.31	0.89	1.19	1.19	1.72	1.92	1.19	1.20	0.75	0.75	0.71	1.31	14.13	
-10– -6	2.26	2.06	2.26	2.14	2.90	2.74	2.66	2.81	2.54	2.15	2.39	2.30	29.22	
-5– -1	1.92	2.24	2.72	1.90	1.81	1.93	2.85	2.76	3.14	3.03	2.85	1.99	29.13	
0– 4	1.20	1.17	1.31	1.64	0.71	0.69	0.95	1.15	1.08	1.37	1.59	1.35	14.22	
5– 9	0.55	0.53	0.35	0.46	0.35	0.20	0.38	0.26	0.44	0.58	0.27	0.40	4.76	
10– 14	0.09	0.11	0.39	0.09	0.05	0.04	0.09	0.16	0.02	0.16	0.07	0.09	1.08	
15– 19	0.00	0.00	0.02	0.02	0.05	0.00	0.04	0.02	0.00	0.05	0.02	0.00	0.22	
20– 24	0.00	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.09	
MISSING	0.15	0.09	0.04	0.18	0.18	0.05	0.15	0.02	0.20	0.09	0.02	0.07	1.24	
TOTAL	8.49	7.74	8.49	8.21	8.49	8.21	8.49	8.49	8.21	8.49	8.21	8.49	100.00	

NUMBER OF OBSERVATIONS 5479														
		MONTH												
O'HARE	MINUS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
ARGONNE														
-30– -26	0.16	0.07	0.07	0.05	0.11	0.05	0.00	0.00	0.00	0.02	0.04	0.18	0.77	
-25– -21	0.26	0.20	0.13	0.16	0.18	0.11	0.05	0.02	0.02	0.05	0.05	0.27	1.51	
-20– -16	0.86	0.47	0.55	0.37	0.55	0.47	0.26	0.20	0.16	0.31	0.29	0.66	5.15	
-15– -11	1.08	1.15	1.41	0.97	1.02	1.13	0.78	0.57	0.86	0.32	0.77	1.13	11.68	
-10– -6	1.90	1.61	2.14	1.83	1.62	1.88	2.52	2.88	2.32	1.64	1.99	2.10	24.62	
-5– -1	2.26	2.52	2.45	2.50	2.61	2.50	2.43	2.76	2.03	2.30	2.19	2.23	28.76	
0– 4	1.48	1.39	1.17	1.50	1.31	1.22	1.10	1.20	1.31	1.66	1.95	1.31	16.61	
5– 9	0.29	0.18	0.35	0.51	0.57	0.38	0.42	0.20	0.49	0.44	0.44	0.46	4.73	
10– 14	0.04	0.04	0.11	0.09	0.22	0.18	0.15	0.07	0.11	0.24	0.26	0.07	1.57	
15– 19	0.02	0.02	0.02	0.04	0.13	0.18	0.05	0.00	0.07	0.15	0.13	0.00	0.80	
20– 24	0.00	0.02	0.04	0.04	0.04	0.02	0.04	0.00	0.11	0.07	0.05	0.00	0.42	
MISSING	0.15	0.07	0.07	0.16	0.13	0.07	0.69	0.58	0.73	0.58	0.05	0.07	3.38	
TOTAL	8.49	7.74	8.49	8.21	8.49	8.21	8.49	8.49	8.21	8.49	8.21	8.49	100.00	

Table 549. Percentage Frequency Distribution of the Difference in the Daily Minimum Relative Humidity in Percent at the Chicago Stations and Argonne Meteorology Site. January 1950–December 1964

NUMBER OF OBSERVATIONS 5479														
		MONTH												
MIDWAY MINUS ARGONNE		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
-30- -26		0.24	0.11	0.05	0.11	0.29	0.20	0.13	0.02	0.11	0.09	0.13	0.27	1.75
-25- -21		0.26	0.44	0.55	0.46	0.49	0.58	0.42	0.26	0.29	0.33	0.16	0.38	4.62
-20- -16		0.97	0.71	0.95	0.73	1.26	0.91	1.22	0.97	1.30	0.89	0.73	0.84	11.48
-15- -11		1.20	1.24	1.97	1.81	1.51	2.06	1.73	2.21	1.72	1.73	1.31	1.37	19.88
-10- -6		2.32	1.92	2.10	2.32	2.34	2.15	2.59	3.23	2.54	2.46	2.45	2.19	28.60
-5- -1		2.35	2.37	2.15	2.03	1.64	1.39	1.50	1.46	1.48	1.72	2.12	2.45	22.65
0- 4		0.82	0.77	0.60	0.51	0.60	0.57	0.46	0.29	0.42	0.91	1.15	0.78	7.88
5- 9		0.18	0.11	0.05	0.07	0.11	0.15	0.20	0.02	0.15	0.13	0.11	0.11	1.39
10- 14		0.04	0.02	0.02	0.04	0.09	0.09	0.04	0.02	0.04	0.09	0.02	0.02	0.51
15- 19		0.00	0.00	0.00	0.00	0.02	0.05	0.04	0.00	0.00	0.00	0.02	0.00	0.13
20- 24		0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.05	0.00	0.00	0.09
MISSING		0.09	0.05	0.04	0.15	0.13	0.05	0.15	0.02	0.18	0.07	0.02	0.07	1.02
TOTAL		8.49	7.74	8.49	8.21	8.49	8.21	8.49	8.49	8.21	8.49	8.21	8.49	100.00

NUMBER OF OBSERVATIONS 5479														
		MONTH												
O'HARE MINUS ARGONNE		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
-30- -26		0.26	0.09	0.07	0.05	0.04	0.04	0.04	0.00	0.02	0.00	0.04	0.29	0.93
-25- -21		0.24	0.16	0.04	0.00	0.07	0.02	0.00	0.00	0.00	0.00	0.11	0.27	0.91
-20- -16		0.68	0.26	0.20	0.22	0.22	0.22	0.15	0.11	0.07	0.07	0.13	0.33	2.65
-15- -11		1.11	0.77	0.58	0.66	0.95	0.73	0.40	0.55	0.26	0.13	0.44	0.95	7.52
-10- -6		1.53	1.20	1.22	1.48	1.84	1.64	1.26	1.33	1.02	0.80	1.22	1.57	16.13
-5- -1		1.84	1.86	2.06	2.12	2.43	2.19	2.10	2.46	2.76	2.85	2.30	2.12	27.09
0- 4		1.35	1.66	1.92	1.92	1.73	2.06	2.01	2.06	2.08	2.28	2.10	1.59	22.76
5- 9		0.86	0.93	1.46	1.02	0.75	0.93	1.35	1.10	1.04	1.20	1.24	0.89	12.78
10- 14		0.26	0.42	0.57	0.42	0.16	0.29	0.37	0.24	0.16	0.47	0.53	0.31	4.20
15- 19		0.13	0.22	0.22	0.11	0.11	0.02	0.11	0.05	0.05	0.05	0.05	0.07	1.20
20- 24		0.04	0.05	0.07	0.02	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.02	0.24
MISSING		0.20	0.11	0.07	0.20	0.18	0.07	0.69	0.58	0.75	0.60	0.05	0.07	3.60
TOTAL		8.49	7.74	8.49	8.21	8.49	8.21	8.49	8.49	8.21	8.49	8.21	8.49	100.00

Table 550. Monthly Maximum Relative Humidity in Percent at Midway Airport and Argonne Meteorology Site. January 1950–December 1964.
Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	MIDWAY	100	99	99	99	95	99	99	100	99	96	99	100
	ARGONNE	100	100	100	99	98	94	100	100	100	100	100	100
	DIFFERENCE	0	-1	-1	0	-3	5	-1	0	-1	-4	-1	0
1951	MIDWAY	99	100	98	100	97	97	100	99	99	98	98	99
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-1	0	-2	0	-3	-3	0	-1	-1	-2	-2	-1
1952	MIDWAY	98	97	97	95	98	99	98	99	99	98	97	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-2	-3	-3	-5	-2	-1	-2	-1	-1	-2	-3	0
1953	MIDWAY	99	99	100	99	99	100	100	98	93	97	96	95
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-1	-1	0	-1	-1	0	0	-2	-7	-3	-4	-5
1954	MIDWAY	99	98	96	94	94	96	95	96	95	98	95	96
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-1	-2	-4	-6	-6	-4	-5	-4	-5	-2	-5	-4
1955	MIDWAY	96	96	93	94	96	94	95	95	96	97	98	99
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-4	-4	-7	-6	-4	-6	-5	-5	-4	-3	-2	-1
1956	MIDWAY	99	100	98	98	99	92	98	99	97	100	100	99
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-1	0	-2	-2	-1	-8	-2	-1	-3	0	0	-1
1957	MIDWAY	99	98	98	99	99	98	100	100	100	99	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-1	-2	-2	-1	-1	-2	0	0	0	-1	0	0
1958	MIDWAY	100	98	97	97	98	99	99	100	98	100	100	99
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	-2	-3	-3	-2	-1	-1	0	-2	0	0	-1
1959	MIDWAY	100	100	99	100	100	100	99	99	98	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	-1	0	0	0	-1	-1	-2	0	0	0
1960	MIDWAY	100	99	100	98	98	99	99	97	100	100	100	96
	ARGONNE	100	100	100	100	100	99	100	100	100	100	100	100
	DIFFERENCE	0	-1	0	-2	-2	0	-1	-3	0	0	0	-4
1961	MIDWAY	96	100	100	100	100	100	97	100	100	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-4	0	0	0	0	-3	0	0	0	0	0	0
1962	MIDWAY	100	100	100	97	96	96	97	97	96	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	0	-3	-4	-4	-3	-3	-4	0	0	0
1963	MIDWAY	96	100	100	100	96	96	100	97	96	97	100	96
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-4	0	0	0	-4	-4	0	-3	-4	-3	0	-4
1964	MIDWAY	100	96	100	97	93	97	100	93	100	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	-4	0	-3	-7	-3	0	-7	0	0	0	0

Table 551. Monthly Maximum Relative Humidity in Percent at O'Hare
 International Airport and Argonne Meteorology Site.
 January 1950–December 1964. Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	O'HARE	100	100	100	100	99	100	100	100	100	100	100	100
	ARGONNE	100	100	100	99	98	94	100	100	100	100	100	100
	DIFFERENCE	0	0	0	1	1	6	0	0	0	0	0	0
1951	O'HARE	100	99	100	100	100	100	100	100	100	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	-1	0	0	0	0	0	0	0	0	0	0
1952	O'HARE	100	99	100	99	100	100	100	100	100	98	99	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	-1	0	-1	0	0	0	0	0	-2	-1	0
1953	O'HARE	100	97	100	99	100	100	100	100	100	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	-3	0	-1	0	0	0	0	0	0	0	0
1954	O'HARE	100	100	100	100	100	100	99	100	98	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	0	0	0	0	-1	0	-2	0	0	0
1955	O'HARE	100	100	100	100	100	99	100	100	99	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	0	0	0	-1	0	0	-1	0	0	0
1956	O'HARE	98	100	100	100	100	98	100	98	96	98	100	99
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-2	0	0	0	0	-2	0	-2	-4	-2	0	-1
1957	O'HARE	100	100	98	100	100	99	100	100	100	99	99	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	-2	0	0	-1	0	0	0	-1	-1	0
1958	O'HARE	100	99	98	98	100	99	0	0	0	0	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	-1	-2	-2	0	-1	-100	-100	-100	-100	-100	0
1959	O'HARE	100	100	100	100	99	99	100	100	100	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	0	0	-1	-1	0	0	0	0	0	0
1960	O'HARE	100	100	99	100	99	99	100	100	100	100	100	100
	ARGONNE	100	100	100	100	100	99	100	100	100	100	100	100
	DIFFERENCE	0	0	-1	0	-1	0	0	0	0	0	0	0
1961	O'HARE	100	100	100	100	100	96	96	100	100	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	0	0	0	-4	-4	0	0	0	0	0
1962	O'HARE	100	100	100	100	100	96	97	96	97	96	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	0	0	0	0	-4	-3	-4	-3	-4	0	0
1963	O'HARE	95	100	100	89	100	86	100	100	93	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	-5	0	0	-11	0	-14	0	0	-7	0	0	0
1964	O'HARE	100	96	96	100	100	100	97	96	100	100	100	100
	ARGONNE	100	100	100	100	100	100	100	100	100	100	100	100
	DIFFERENCE	0	-4	-4	0	0	0	-3	-4	0	0	0	0

Table 552. Monthly Minimum Relative Humidity in Percent at Midway Airport and Argonne Meteorology Site. January 1950–December 1964.
Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	MIDWAY	33	43	33	22	23	20	28	28	33	24	26	31
	ARGONNE	36	42	48	44	28	34	38	38	39	26	27	46
	DIFFERENCE	-3	1	-15	-22	-5	-14	-10	-10	-6	-2	-1	-15
1951	MIDWAY	20	40	28	21	24	27	27	38	33	31	30	29
	ARGONNE	56	50	28	28	29	26	31	34	32	36	31	40
	DIFFERENCE	-36	-10	0	-7	-5	1	-4	4	1	-5	-1	-11
1952	MIDWAY	43	35	29	14	21	29	27	26	24	16	26	38
	ARGONNE	40	30	18	14	20	26	31	30	27	22	29	32
	DIFFERENCE	3	5	11	0	1	3	-4	-4	-3	-6	-3	6
1953	MIDWAY	46	29	34	15	23	25	29	20	17	17	14	36
	ARGONNE	51	45	43	31	36	39	40	33	31	24	20	51
	DIFFERENCE	-5	-16	-9	-16	-13	-14	-11	-13	-14	-7	-6	-15
1954	MIDWAY	13	26	26	21	20	26	28	30	19	22	33	36
	ARGONNE	33	42	32	32	27	37	40	40	27	27	40	47
	DIFFERENCE	-20	-16	-6	-11	-7	-11	-12	-10	-8	-5	-7	-11
1955	MIDWAY	27	26	24	12	17	22	28	26	19	20	30	26
	ARGONNE	44	50	33	24	30	35	34	36	31	34	37	32
	DIFFERENCE	-17	-24	-9	-12	-13	-13	-6	-10	-12	-14	-7	-6
1956	MIDWAY	27	29	17	13	21	21	27	31	12	14	23	41
	ARGONNE	29	40	33	36	34	29	33	36	23	20	32	43
	DIFFERENCE	-2	-11	-16	-23	-13	-8	-6	-5	-11	-6	-9	-2
1957	MIDWAY	30	29	24	25	19	28	27	33	19	26	30	34
	ARGONNE	39	29	28	30	28	33	33	36	31	21	33	36
	DIFFERENCE	-9	0	-4	-5	-9	-5	-6	-3	-12	5	-3	-2
1958	MIDWAY	46	45	19	16	14	26	29	33	26	21	26	39
	ARGONNE	47	48	30	27	22	32	34	42	34	27	38	51
	DIFFERENCE	-1	-3	-11	-11	-8	-6	-5	-9	-8	-6	-12	-12
1959	MIDWAY	35	41	21	15	20	17	23	37	20	27	32	23
	ARGONNE	47	46	34	30	34	36	34	42	30	35	43	32
	DIFFERENCE	-12	-5	-13	-15	-14	-19	-11	-5	-10	-8	-11	-9
1960	MIDWAY	44	39	40	17	12	16	28	29	29	24	20	26
	ARGONNE	46	53	46	33	36	34	32	39	33	24	33	30
	DIFFERENCE	-2	-14	-6	-16	-24	-18	-4	-10	-4	0	-13	-4
1961	MIDWAY	35	22	17	23	16	19	21	21	26	29	32	34
	ARGONNE	37	29	23	25	26	30	27	35	35	40	42	42
	DIFFERENCE	-2	-7	-6	-2	-10	-11	-6	-14	-9	-11	-10	-8
1962	MIDWAY	36	40	13	13	23	25	29	22	24	24	25	30
	ARGONNE	42	42	19	21	31	35	39	31	32	30	33	33
	DIFFERENCE	-6	-2	-6	-8	-8	-10	-10	-9	-8	-6	-8	-3
1963	MIDWAY	35	22	17	15	15	18	20	40	31	20	23	41
	ARGONNE	50	35	20	22	29	28	25	46	38	21	26	44
	DIFFERENCE	-15	-13	-3	-7	-14	-10	-5	-6	-7	-1	-3	-3
1964	MIDWAY	38	31	24	23	24	23	22	31	28	24	23	39
	ARGONNE	35	33	25	19	29	27	27	31	34	26	25	50
	DIFFERENCE	3	-2	-1	4	-5	-4	-5	0	-6	-2	-2	-11

Table 553. Monthly Minimum Relative Humidity in Percent at O'Hare International Airport and Argonne Meteorology Site.
January 1950–December 1964. Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	O'HARE	40	38	36	30	20	19	25	28	34	30	32	16
	ARGONNE	36	42	48	44	28	34	38	38	39	26	27	46
	DIFFERENCE	4	-4	-12	-14	-8	-15	-13	-10	-5	4	5	-30
1951	O'HARE	25	40	31	29	25	27	31	39	33	31	22	39
	ARGONNE	56	50	28	28	29	26	31	34	32	36	31	40
	DIFFERENCE	-31	-10	3	1	-4	1	0	5	1	-5	-9	-1
1952	O'HARE	42	44	36	17	20	28	31	29	24	10	23	48
	ARGONNE	40	30	18	14	20	26	31	30	27	22	29	32
	DIFFERENCE	2	14	18	3	0	2	0	-1	-3	-12	-6	16
1953	O'HARE	50	34	35	16	27	26	30	23	19	20	16	41
	ARGONNE	51	45	43	31	36	39	40	33	31	24	20	51
	DIFFERENCE	-1	-11	-8	-15	-9	-13	-10	-10	-12	-4	-4	-10
1954	O'HARE	23	26	19	13	21	29	31	43	30	21	33	40
	ARGONNE	33	42	32	32	27	37	40	40	27	27	40	47
	DIFFERENCE	-10	-16	-13	-19	-6	-8	-9	3	3	-6	-7	-7
1955	O'HARE	28	23	15	15	23	32	37	25	21	25	31	36
	ARGONNE	44	50	33	24	30	35	34	36	31	34	37	32
	DIFFERENCE	-16	-27	-18	-9	-7	-3	3	-11	-10	-9	-6	4
1956	O'HARE	27	40	30	22	25	26	31	36	16	20	23	34
	ARGONNE	29	40	33	36	34	29	33	36	23	20	32	43
	DIFFERENCE	-2	0	-3	-14	-9	-3	-2	0	-7	0	-9	-9
1957	O'HARE	10	40	27	23	19	34	27	35	19	26	34	8
	ARGONNE	39	29	28	30	28	33	33	36	31	21	33	36
	DIFFERENCE	-29	11	-1	-7	-9	1	-6	-1	-12	5	1	-28
1958	O'HARE	45	29	30	26	19	36	34	42	34	27	25	26
	ARGONNE	47	48	30	27	22	32	34	42	34	27	38	51
	DIFFERENCE	-2	-19	0	-1	-3	4	-8	0	-8	-8	-13	-25
1959	O'HARE	43	30	22	20	20	18	26	42	22	27	35	30
	ARGONNE	47	46	34	30	34	36	34	42	30	35	43	32
	DIFFERENCE	-4	-16	-12	-10	-14	-18	-8	0	-8	-8	-8	-2
1960	O'HARE	49	46	45	19	23	21	30	31	31	28	19	30
	ARGONNE	46	53	46	33	36	34	32	39	33	24	33	30
	DIFFERENCE	3	-7	-1	-14	-13	-13	-2	-8	-2	4	-14	0
1961	O'HARE	32	26	22	27	19	26	30	35	38	36	33	40
	ARGONNE	37	29	23	25	26	30	27	35	35	40	42	42
	DIFFERENCE	-5	-3	-1	2	-7	-4	3	0	3	-4	-9	-2
1962	O'HARE	40	48	23	14	23	33	37	28	0	25	29	34
	ARGONNE	42	42	19	21	31	35	39	31	32	30	33	33
	DIFFERENCE	-2	6	4	-7	-8	-2	-2	-3	-32	-5	-4	1
1963	O'HARE	36	27	14	20	23	24	24	40	32	22	28	47
	ARGONNE	50	35	20	22	29	28	25	46	38	21	26	44
	DIFFERENCE	-14	-8	-6	-2	-6	-4	-1	-6	-6	1	2	3
1964	O'HARE	33	36	23	24	32	33	24	29	32	23	26	41
	ARGONNE	35	33	25	19	29	27	27	31	34	26	25	50
	DIFFERENCE	-2	3	-2	5	3	6	-3	-2	-2	-3	1	-9

Table 554. Monthly Average of the Daily Maximum Relative Humidity in Percent at Midway Airport and Argonne Meteorology Site.
January 1950–December 1964. Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	MIDWAY	89	90	85	86	81	87	88	90	91	85	86	88
	ARGONNE	90	93	89	92	78	82	89	96	96	94	94	94
	DIFFERENCE	-1	-3	-4	-6	3	5	-1	-6	-5	-9	-8	-6
1951	MIDWAY	86	88	83	87	85	87	89	92	89	89	85	85
	ARGONNE	92	92	92	98	96	99	99	99	99	98	92	95
	DIFFERENCE	-6	-4	-9	-11	-11	-12	-10	-7	-10	-9	-7	-10
1952	MIDWAY	86	84	85	78	84	87	88	90	88	74	81	90
	ARGONNE	94	96	95	86	94	97	99	98	97	83	91	96
	DIFFERENCE	-8	-12	-10	-8	-10	-10	-11	-8	-9	-9	-10	-6
1953	MIDWAY	90	83	88	83	86	85	87	81	77	78	82	82
	ARGONNE	99	93	95	88	94	96	98	92	91	90	85	94
	DIFFERENCE	-9	-10	-7	-5	-8	-11	-11	-11	-14	-12	-3	-12
1954	MIDWAY	81	80	81	82	77	83	83	88	83	87	86	85
	ARGONNE	93	90	89	96	89	95	94	100	96	96	98	99
	DIFFERENCE	-12	-10	-8	-14	-12	-12	-11	-12	-13	-9	-12	-14
1955	MIDWAY	80	83	79	79	75	80	84	80	78	87	87	81
	ARGONNE	96	97	94	92	89	92	96	93	88	98	97	94
	DIFFERENCE	-16	-14	-15	-13	-14	-12	-12	-13	-10	-11	-10	-13
1956	MIDWAY	86	90	85	78	82	80	85	87	80	79	83	91
	ARGONNE	97	98	92	86	90	90	99	99	95	91	94	96
	DIFFERENCE	-11	-8	-7	-8	-8	-10	-14	-12	-15	-12	-11	-5
1957	MIDWAY	87	87	82	90	84	88	87	89	87	87	86	87
	ARGONNE	89	93	94	96	93	96	96	98	99	93	91	95
	DIFFERENCE	-2	-6	-12	-6	-9	-8	-9	-9	-12	-6	-5	-8
1958	MIDWAY	89	85	85	80	73	87	89	88	86	82	85	86
	ARGONNE	94	87	97	88	84	97	99	99	96	92	92	95
	DIFFERENCE	-5	-2	-12	-8	-11	-10	-10	-11	-10	-10	-7	-9
1959	MIDWAY	89	90	87	80	86	81	86	89	84	88	85	92
	ARGONNE	91	92	93	87	96	93	94	99	93	95	91	97
	DIFFERENCE	-2	-2	-6	-7	-10	-12	-8	-10	-9	-7	-6	-5
1960	MIDWAY	90	91	88	84	85	86	86	88	89	87	89	84
	ARGONNE	95	94	95	93	93	91	90	99	100	95	97	86
	DIFFERENCE	-5	-3	-7	-9	-8	-5	-4	-11	-11	-8	-8	-2
1961	MIDWAY	85	90	87	89	79	78	87	89	89	87	87	86
	ARGONNE	90	97	97	95	92	93	98	99	89	97	92	90
	DIFFERENCE	-5	-7	-10	-6	-13	-15	-11	-10	0	-10	-5	-4
1962	MIDWAY	85	88	87	78	83	83	87	84	84	87	87	82
	ARGONNE	99	99	96	89	93	94	96	94	94	94	93	95
	DIFFERENCE	-14	-11	-9	-11	-10	-11	-9	-10	-10	-7	-6	-13
1963	MIDWAY	81	82	87	79	79	79	82	89	88	83	87	83
	ARGONNE	96	94	95	89	89	92	88	96	96	85	91	97
	DIFFERENCE	-15	-12	-8	-10	-10	-13	-6	-7	-8	-2	-4	-14
1964	MIDWAY	84	81	80	81	74	82	84	84	87	86	83	88
	ARGONNE	94	96	94	91	89	92	96	92	93	85	91	96
	DIFFERENCE	-10	-15	-14	-10	-15	-10	-12	-8	-6	1	-8	-8

Table 555. Monthly Average of the Daily Maximum Relative Humidity in Percent at O'Hare International Airport and Argonne Meteorology Site.
January 1950–December 1964. Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	O'HARE	90	90	87	90	86	92	92	94	96	92	88	89
	ARGONNE	90	93	89	92	78	82	89	96	96	94	94	94
	DIFFERENCE	0	-3	-2	-2	8	10	3	-2	0	-2	-6	-5
1951	O'HARE	90	89	89	93	92	93	95	96	94	96	91	90
	ARGONNE	92	92	92	98	96	99	99	99	99	98	92	95
	DIFFERENCE	-2	-3	-3	-5	-4	-6	-4	-3	-5	-2	-1	-5
1952	O'HARE	92	90	89	85	89	91	92	94	92	81	86	93
	ARGONNE	94	96	95	86	94	97	99	98	97	83	91	96
	DIFFERENCE	-2	-6	-6	-1	-5	-6	-7	-4	-5	-2	-5	-3
1953	O'HARE	91	86	90	88	90	91	92	90	90	89	88	89
	ARGONNE	99	93	95	88	94	96	98	92	91	90	85	94
	DIFFERENCE	-8	-7	-5	0	-4	-5	-6	-2	-1	-1	3	-5
1954	O'HARE	88	89	86	89	87	92	90	94	91	94	93	91
	ARGONNE	93	90	89	96	89	95	94	100	96	96	98	99
	DIFFERENCE	-5	-1	-3	-7	-2	-3	-4	-6	-5	-2	-5	-8
1955	O'HARE	88	88	86	88	85	91	94	88	87	93	90	81
	ARGONNE	96	97	94	92	89	92	96	93	88	98	97	94
	DIFFERENCE	-8	-9	-8	-4	-4	-1	-2	-5	-1	-5	-7	-13
1956	O'HARE	84	87	89	83	88	83	89	91	85	82	83	83
	ARGONNE	97	98	92	86	90	90	99	99	95	91	94	96
	DIFFERENCE	-13	-11	-3	-3	-2	-7	-10	-8	-10	-9	-11	-13
1957	O'HARE	79	89	82	91	88	91	92	94	93	91	89	90
	ARGONNE	89	93	94	96	93	96	96	98	99	93	91	95
	DIFFERENCE	-10	-4	-12	-5	-5	-5	-4	-4	-6	-2	-2	-5
1958	O'HARE	87	78	89	86	80	93	93	99	99	92	86	85
	ARGONNE	94	87	97	88	84	97	99	99	96	92	92	95
	DIFFERENCE	-7	-9	-8	-2	-4	-4	-2	-6	-5	-6	-6	-10
1959	O'HARE	87	88	89	84	88	84	92	93	88	90	86	92
	ARGONNE	91	92	93	87	96	93	94	99	93	95	91	97
	DIFFERENCE	-4	-4	-4	-3	-8	-9	-2	-6	-5	-5	-5	-5
1960	O'HARE	89	88	87	88	87	88	89	92	93	90	91	85
	ARGONNE	95	94	95	93	93	91	90	99	100	95	97	86
	DIFFERENCE	-6	-6	-8	-5	-6	-3	-1	-7	-7	-5	-6	-1
1961	O'HARE	89	97	95	89	83	85	90	92	94	90	90	88
	ARGONNE	90	97	97	95	92	93	98	99	89	97	92	90
	DIFFERENCE	-1	0	-2	-6	-9	-8	-8	-7	5	-7	-2	-2
1962	O'HARE	89	92	91	81	86	86	89	89	91	87	90	83
	ARGONNE	99	99	96	89	93	94	96	94	94	94	93	95
	DIFFERENCE	-10	-7	-5	-8	-7	-8	-7	-5	-3	-7	-3	-12
1963	O'HARE	79	79	84	75	74	80	82	87	86	82	93	87
	ARGONNE	96	94	95	89	89	92	88	96	96	85	91	97
	DIFFERENCE	-17	-15	-11	-14	-15	-12	-6	-9	-10	-3	2	-10
1964	O'HARE	87	87	85	87	87	91	92	91	94	92	93	92
	ARGONNE	94	96	94	91	89	92	96	92	93	85	91	96
	DIFFERENCE	-7	-9	-9	-4	-2	-1	-4	-1	1	7	2	-4

Table 556. Monthly Average of the Daily Minimum Relative Humidity in Percent at Midway Airport and Argonne Meteorology Site.
January 1950–December 1964. Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	MIDWAY	60	63	55	52	39	43	43	46	54	44	52	64
	ARGONNE	64	66	61	60	45	55	49	52	57	46	53	66
	DIFFERENCE	-4	-3	-6	-8	-6	-12	-6	-6	-3	-2	-1	-2
1951	MIDWAY	60	64	53	50	44	49	48	54	46	52	52	57
	ARGONNE	68	70	56	52	50	52	50	54	46	55	55	65
	DIFFERENCE	-8	-6	-3	-2	-6	-3	-2	0	0	-3	-3	-8
1952	MIDWAY	62	56	54	40	46	50	45	48	44	34	47	68
	ARGONNE	68	57	56	37	43	52	46	47	45	34	47	71
	DIFFERENCE	-6	-1	-2	3	3	-2	-1	1	-1	0	0	-3
1953	MIDWAY	65	51	54	45	46	46	42	39	31	38	45	53
	ARGONNE	72	60	61	50	54	55	50	46	40	44	53	67
	DIFFERENCE	-7	-9	-7	-5	-8	-9	-8	-7	-9	-6	-8	-14
1954	MIDWAY	53	48	45	47	36	43	44	49	42	50	53	60
	ARGONNE	66	57	49	55	44	51	50	54	47	54	60	70
	DIFFERENCE	-13	-9	-4	-8	-8	-8	-6	-5	-5	-4	-7	-10
1955	MIDWAY	53	55	43	37	35	42	42	38	37	47	55	53
	ARGONNE	65	68	50	44	45	49	50	46	45	55	62	60
	DIFFERENCE	-12	-13	-7	-7	-10	-7	-8	-8	-8	-8	-7	-7
1956	MIDWAY	56	58	46	37	43	40	43	45	33	37	52	68
	ARGONNE	60	63	49	51	54	46	49	51	38	39	54	71
	DIFFERENCE	-4	-5	-3	-14	-11	-6	-6	-6	-5	-2	-2	-3
1957	MIDWAY	60	59	43	53	52	47	47	50	46	48	54	55
	ARGONNE	58	58	44	54	52	49	50	53	49	47	56	59
	DIFFERENCE	2	1	-1	-1	0	-2	-3	-3	-3	1	-2	-4
1958	MIDWAY	65	60	51	38	30	44	51	47	46	42	49	62
	ARGONNE	69	62	56	45	37	51	55	53	52	49	53	69
	DIFFERENCE	-4	-2	-5	-7	-7	-7	-4	-6	-6	-7	-4	-7
1959	MIDWAY	62	62	51	41	45	36	42	51	42	57	54	63
	ARGONNE	65	63	54	47	54	47	48	59	47	62	61	69
	DIFFERENCE	-3	-1	-3	-6	-9	-11	-6	-8	-5	-5	-7	-6
1960	MIDWAY	66	66	55	43	47	46	41	46	47	46	52	52
	ARGONNE	74	71	65	55	61	58	42	51	50	46	56	50
	DIFFERENCE	-8	-5	-10	-12	-14	-12	-1	-5	-3	0	-4	2
1961	MIDWAY	54	57	52	47	37	36	44	46	48	49	54	60
	ARGONNE	57	58	58	48	42	42	49	52	53	59	59	66
	DIFFERENCE	-3	-1	-6	-1	-5	-6	-5	-6	-5	-10	-5	-6
1962	MIDWAY	60	61	56	36	42	43	47	42	39	46	49	50
	ARGONNE	75	73	67	43	55	54	57	51	46	53	55	62
	DIFFERENCE	-15	-12	-11	-7	-13	-11	-10	-9	-7	-7	-6	-12
1963	MIDWAY	55	46	51	32	39	36	41	51	51	39	50	58
	ARGONNE	69	58	56	37	45	47	47	57	55	41	51	69
	DIFFERENCE	-14	-12	-5	-5	-6	-11	-6	-6	-4	-2	-1	-11
1964	MIDWAY	56	53	50	51	38	41	50	43	47	40	48	66
	ARGONNE	57	55	55	53	43	46	54	48	49	41	53	74
	DIFFERENCE	-1	-2	-5	-2	-5	-5	-4	-5	-2	-1	-5	-8

Table 557. Monthly Average of the Daily Minimum Relative Humidity in Percent at O'Hare International Airport and Argonne Meteorology Site.
January 1950–December 1964. Number of Observations, 5479

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	O'HARE	65	65	63	59	39	48	46	49	55	50	52	62
	ARGONNE	64	66	61	60	45	55	49	52	57	46	53	66
	DIFFERENCE	1	-1	2	-1	-6	-7	-3	-3	-2	4	-1	-4
1951	O'HARE	65	68	58	56	47	49	51	55	49	59	58	63
	ARGONNE	68	70	56	52	50	52	50	54	46	55	55	65
	DIFFERENCE	-3	-2	2	4	-3	-3	1	1	3	4	3	-2
1952	O'HARE	67	62	58	40	46	51	49	50	43	31	47	71
	ARGONNE	68	57	56	37	43	52	46	47	45	34	47	71
	DIFFERENCE	-1	5	2	3	3	-1	3	3	-2	-3	0	0
1953	O'HARE	71	56	60	49	49	49	44	43	36	43	50	60
	ARGONNE	72	60	61	50	54	55	50	46	40	44	53	67
	DIFFERENCE	-1	-4	-1	-1	-5	-6	-6	-3	-4	-1	-3	-7
1954	O'HARE	58	56	46	50	41	49	49	56	51	58	61	65
	ARGONNE	66	57	49	55	44	51	50	54	47	54	60	70
	DIFFERENCE	-8	-1	-3	-5	-3	-2	-1	2	4	4	1	-5
1955	O'HARE	57	60	47	43	42	50	50	41	42	52	58	55
	ARGONNE	65	68	50	44	45	49	50	46	45	55	62	60
	DIFFERENCE	-8	-8	-3	-1	-3	1	0	-5	-3	-3	-4	-5
1956	O'HARE	53	60	52	42	49	45	47	51	37	40	50	57
	ARGONNE	60	63	49	51	54	46	49	51	38	39	54	71
	DIFFERENCE	-7	-3	3	-9	-5	-1	-2	0	-1	1	-4	-14
1957	O'HARE	49	66	50	54	53	50	51	54	48	50	58	56
	ARGONNE	58	58	44	54	52	49	50	53	49	47	56	59
	DIFFERENCE	-9	8	6	0	1	1	1	1	-1	3	2	-3
1958	O'HARE	66	53	58	45	37	54	51	53	52	49	50	58
	ARGONNE	69	62	56	45	37	51	55	53	52	49	53	69
	DIFFERENCE	-3	-9	2	0	0	3	3	0	2	-3	-3	-11
1959	O'HARE	61	61	53	44	47	41	44	55	45	60	57	69
	ARGONNE	65	63	54	47	54	47	48	59	47	62	61	69
	DIFFERENCE	-4	-2	-1	-3	-7	-6	-4	-4	-2	-2	-4	0
1960	O'HARE	69	67	60	47	50	48	46	52	51	48	55	55
	ARGONNE	74	71	65	55	61	58	42	51	50	46	56	50
	DIFFERENCE	-5	-4	-5	-8	-11	-10	4	1	1	2	-1	5
1961	O'HARE	58	65	60	48	41	44	53	53	58	57	57	61
	ARGONNE	57	58	58	48	42	42	49	52	53	59	59	66
	DIFFERENCE	1	7	2	0	-1	2	4	1	5	-2	-2	-5
1962	O'HARE	62	67	63	39	48	50	55	48	41	49	52	55
	ARGONNE	75	73	67	43	55	54	57	51	46	53	55	62
	DIFFERENCE	-13	-6	-4	-4	-7	-4	-2	-3	-5	-4	-3	-7
1963	O'HARE	56	49	53	36	41	41	44	47	48	40	56	64
	ARGONNE	69	58	56	37	45	47	47	57	55	41	51	69
	DIFFERENCE	-13	-9	-3	-1	-4	-6	-3	-10	-7	-1	5	-5
1964	O'HARE	54	53	51	52	43	47	54	46	48	41	54	69
	ARGONNE	57	55	55	53	43	46	54	48	49	41	53	74
	DIFFERENCE	-3	-2	-4	-1	0	1	0	-2	-1	0	1	-5

Section 3.4

Station Pressure Comparisons

Tables 558 through 570. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. January 1950–December 1964 (Midway). November 1958–December 1964 (O'Hare).

Since the Argonne station is 746 feet and the Midway Airport station is 614 feet above sea level--a difference of 132 feet--one would expect to find the pressure at Midway about 0.14 inches of mercury higher when the mean air temperature is near 32°F. Indeed, an examination of the last line of the tables for the winter months shows 0.14 inches to be the modal value. During the summer the temperature is higher, the air density lower, and the difference smaller.

Of interest are the deviations from the expected values. These are due to thunderstorm cells, strong pressure gradients in the area, the 30-minute difference in observation time from January 1, 1950 to June 1, 1957, and the mean temperature and humidity in the air layer from 614 to 746 feet above sea level.

There appears to be another most interesting effect, viz., a circulation cell controlled by daytime heating and nighttime cooling. The maximum frequency of the pressure differences greater than 0.16 inches occurs just after sunrise, i.e., at about 0800 CST in January and 0500 or 0600 in July. If the pressure at each station were reduced to a common reference level, e.g., sea level, the pressure at Midway would be higher than that at Argonne.

The smallest values of the pressure difference occur most frequently in the afternoon. In these cases, relative pressure is higher at Argonne. The existence of a pressure gradient component which reverses direction with time of day is of importance in understanding the circulation of air over the city and the associated distribution of air pollution.

A comparison of the O'Hare and Argonne pressures shows a similar pattern.

Tables 571 and 572. Monthly Average Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site. January 1950–December 1964 (Midway). November 1958–December 1964 (O'Hare).

Monthly mean pressure values for Argonne, Midway, and O'Hare are presented; also given are the differences between the Argonne values and those of the other two stations. In the Midway comparison the differences range from 0.11 to 0.16. Higher difference values occur in winter when the air is

denser as one would expect. In examining the O'Hare comparison one must bear in mind that the elevation above sea level of the barometer was changed from 667 to 691 feet on November 1, 1958. The change of 24 feet, which is equivalent to about 0.02 inches of mercury, is evident from the data.

Table 558. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. January 1950-1964 (Midway) and January 1959-1964 (O'Hare)

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤ 0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥ 0.20	MISSING	
1	0.00	0.02	0.04	0.16	0.45	0.73	0.97	0.81	0.56	0.30	0.09	0.04	0.00	0.00	4.17
2	0.00	0.03	0.01	0.13	0.30	0.66	0.90	0.89	0.63	0.45	0.11	0.07	0.00	0.00	4.17
3	0.01	0.04	0.04	0.17	0.34	0.67	0.84	1.02	0.63	0.28	0.09	0.02	0.02	0.00	4.17
4	0.01	0.03	0.10	0.19	0.32	0.65	0.94	0.94	0.56	0.28	0.10	0.04	0.02	0.00	4.17
5	0.01	0.01	0.08	0.14	0.31	0.61	0.82	1.04	0.65	0.29	0.16	0.02	0.02	0.00	4.17
6	0.00	0.01	0.05	0.19	0.22	0.53	1.02	0.82	0.74	0.36	0.16	0.04	0.03	0.00	4.17
7	0.01	0.02	0.06	0.13	0.27	0.56	0.79	0.99	0.78	0.35	0.19	0.03	0.00	0.00	4.17
8	0.02	0.01	0.04	0.13	0.25	0.56	0.68	1.00	0.80	0.47	0.12	0.06	0.03	0.00	4.17
9	0.01	0.01	0.07	0.11	0.30	0.44	0.77	1.06	0.77	0.46	0.13	0.04	0.00	0.00	4.17
10	0.01	0.04	0.05	0.08	0.34	0.63	0.83	0.94	0.76	0.32	0.13	0.01	0.01	0.00	4.17
11	0.03	0.02	0.09	0.19	0.56	0.96	0.94	0.86	0.37	0.14	0.01	0.00	0.00	0.00	4.17
12	0.04	0.00	0.14	0.28	0.65	0.98	1.09	0.68	0.24	0.05	0.01	0.00	0.00	0.00	4.17
13	0.02	0.05	0.10	0.19	0.61	1.03	1.31	0.73	0.32	0.04	0.04	0.01	0.00	0.00	4.17
14	0.02	0.02	0.07	0.24	0.47	0.91	0.88	0.91	0.44	0.15	0.04	0.00	0.01	0.00	4.17
15	0.02	0.02	0.02	0.20	0.40	0.83	0.97	0.87	0.55	0.19	0.10	0.00	0.01	0.00	4.17
16	0.02	0.03	0.04	0.14	0.40	0.69	1.02	0.86	0.55	0.30	0.11	0.01	0.00	0.00	4.17
17	0.00	0.02	0.04	0.18	0.37	0.70	0.86	0.99	0.62	0.24	0.10	0.05	0.00	0.00	4.17
18	0.00	0.03	0.03	0.10	0.37	0.60	0.87	0.96	0.74	0.39	0.07	0.02	0.00	0.00	4.17
19	0.01	0.01	0.04	0.12	0.30	0.73	0.97	0.86	0.68	0.35	0.07	0.02	0.01	0.00	4.17
20	0.01	0.01	0.04	0.12	0.39	0.74	0.94	0.83	0.69	0.27	0.11	0.01	0.01	0.00	4.17
21	0.01	0.01	0.04	0.13	0.35	0.73	1.05	0.80	0.59	0.29	0.12	0.04	0.01	0.00	4.17
22	0.01	0.01	0.06	0.15	0.41	0.79	1.02	0.69	0.57	0.33	0.06	0.04	0.02	0.00	4.17
23	0.01	0.00	0.05	0.21	0.40	0.75	0.92	0.83	0.65	0.23	0.08	0.02	0.01	0.00	4.17
24	0.01	0.02	0.11	0.22	0.35	0.72	0.96	0.91	0.59	0.22	0.06	0.02	0.00	0.00	4.17
TOTAL	0.27	0.44	1.45	3.87	9.14	17.20	22.07	21.28	14.49	6.73	2.27	0.60	0.19	0.00	

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤ 0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥ 0.12	MISSING	
1	0.00	0.00	0.07	0.11	0.31	0.47	0.81	0.85	0.63	0.60	0.20	0.04	0.07	0.00	4.17
2	0.00	0.00	0.02	0.13	0.29	0.36	0.83	0.81	0.81	0.52	0.31	0.02	0.07	0.00	4.17
3	0.00	0.00	0.07	0.11	0.25	0.40	0.54	1.19	0.76	0.47	0.27	0.00	0.11	0.00	4.17
4	0.00	0.04	0.11	0.11	0.13	0.36	0.78	0.81	0.90	0.60	0.20	0.02	0.09	0.00	4.17
5	0.00	0.04	0.02	0.09	0.25	0.45	0.58	0.94	0.85	0.58	0.25	0.04	0.07	0.00	4.17
6	0.00	0.00	0.02	0.07	0.31	0.40	0.65	0.92	0.99	0.45	0.25	0.04	0.07	0.00	4.17
7	0.00	0.00	0.04	0.13	0.09	0.56	0.81	0.78	0.76	0.65	0.25	0.02	0.07	0.00	4.17
8	0.00	0.00	0.09	0.04	0.16	0.43	0.78	0.69	0.85	0.87	0.13	0.07	0.04	0.00	4.17
9	0.00	0.00	0.02	0.11	0.36	0.38	0.52	0.92	0.74	0.76	0.27	0.07	0.02	0.00	4.17
10	0.00	0.02	0.04	0.07	0.13	0.49	0.67	0.72	1.01	0.56	0.34	0.09	0.02	0.00	4.17
11	0.02	0.02	0.07	0.13	0.11	0.49	0.58	0.83	0.85	0.69	0.25	0.07	0.04	0.00	4.17
12	0.02	0.02	0.09	0.11	0.34	0.60	0.72	0.78	0.58	0.16	0.00	0.02	0.00	0.00	4.17
13	0.00	0.11	0.00	0.22	0.29	0.45	0.81	0.99	0.67	0.36	0.18	0.07	0.02	0.00	4.17
14	0.00	0.04	0.07	0.20	0.20	0.45	1.01	0.96	0.67	0.38	0.09	0.02	0.07	0.00	4.17
15	0.02	0.02	0.07	0.31	0.38	0.92	1.16	0.65	0.40	0.09	0.04	0.07	0.00	0.00	4.17
16	0.00	0.00	0.04	0.04	0.31	0.43	1.05	0.72	0.85	0.40	0.20	0.04	0.07	0.00	4.17
17	0.00	0.02	0.04	0.13	0.20	0.45	0.81	0.83	0.90	0.52	0.11	0.11	0.04	0.00	4.17
18	0.00	0.00	0.04	0.07	0.20	0.52	0.56	0.99	0.87	0.49	0.18	0.20	0.04	0.00	4.17
19	0.02	0.00	0.02	0.13	0.20	0.45	0.65	0.99	0.92	0.45	0.20	0.04	0.09	0.00	4.17
20	0.00	0.00	0.00	0.25	0.22	0.31	0.85	0.78	0.96	0.40	0.22	0.13	0.02	0.00	4.17
21	0.00	0.02	0.07	0.11	0.31	0.31	0.56	1.14	0.94	0.36	0.18	0.11	0.04	0.00	4.17
22	0.02	0.02	0.04	0.16	0.22	0.34	0.69	1.01	0.90	0.43	0.20	0.04	0.09	0.00	4.17
23	0.00	0.02	0.04	0.13	0.38	0.31	0.76	0.83	0.81	0.49	0.25	0.06	0.07	0.00	4.17
24	0.02	0.00	0.04	0.16	0.13	0.52	0.76	0.67	1.10	0.36	0.27	0.07	0.07	0.00	4.17
TOTAL	0.13	0.43	1.12	2.91	5.73	10.30	17.70	21.24	20.16	12.39	5.04	1.46	1.39	0.00	

Table 559. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. February 1950-1964 (Midway) and February 1959-1964 (O'Hare)

NUMBER OF OBSERVATIONS 10176

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)												TOTAL		
	≤0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥0.20	MISSING	
1	0.01	0.01	0.02	0.28	0.38	0.86	0.91	0.77	0.49	0.31	0.08	0.03	0.00	0.00	4.17
2	0.01	0.01	0.03	0.20	0.43	0.78	1.06	0.84	0.40	0.31	0.06	0.02	0.02	0.00	4.17
3	0.01	0.03	0.05	0.25	0.41	0.71	0.97	0.85	0.50	0.26	0.09	0.03	0.01	0.00	4.17
4	0.00	0.04	0.03	0.20	0.44	0.69	0.98	0.78	0.51	0.30	0.13	0.05	0.02	0.00	4.17
5	0.00	0.01	0.05	0.16	0.48	0.62	1.00	0.81	0.53	0.28	0.16	0.06	0.01	0.01	4.17
6	0.00	0.00	0.08	0.14	0.28	0.79	0.84	0.90	0.60	0.33	0.13	0.05	0.03	0.01	4.17
7	0.02	0.01	0.05	0.15	0.37	0.73	0.81	0.81	0.64	0.39	0.12	0.06	0.02	0.00	4.17
8	0.00	0.02	0.02	0.16	0.35	0.54	0.89	1.00	0.59	0.34	0.17	0.07	0.01	0.00	4.17
9	0.01	0.00	0.06	0.16	0.37	0.63	0.92	0.96	0.64	0.28	0.05	0.07	0.01	0.00	4.17
10	0.00	0.01	0.05	0.19	0.44	0.66	0.90	0.90	0.62	0.29	0.06	0.03	0.01	0.00	4.17
11	0.00	0.03	0.02	0.28	0.50	0.77	0.93	0.96	0.44	0.15	0.05	0.03	0.01	0.00	4.17
12	0.01	0.03	0.10	0.34	0.69	0.90	1.02	0.61	0.28	0.14	0.02	0.01	0.01	0.00	4.17
13	0.00	0.00	0.11	0.33	0.72	1.02	1.04	0.54	0.26	0.10	0.05	0.00	0.00	0.00	4.17
14	0.00	0.05	0.06	0.23	0.56	1.20	1.10	0.51	0.32	0.09	0.03	0.02	0.00	0.00	4.17
15	0.00	0.01	0.09	0.28	0.44	0.85	1.34	0.57	0.38	0.14	0.01	0.06	0.01	0.00	4.17
16	0.00	0.02	0.03	0.24	0.46	0.85	1.17	0.72	0.49	0.13	0.03	0.01	0.03	0.00	4.17
17	0.00	0.01	0.09	0.16	0.40	0.75	0.97	1.01	0.42	0.22	0.11	0.02	0.01	0.00	4.17
18	0.00	0.00	0.04	0.20	0.27	0.65	1.06	1.03	0.50	0.28	0.12	0.01	0.02	0.00	4.17
19	0.00	0.02	0.06	0.12	0.44	0.68	1.06	0.92	0.58	0.19	0.06	0.03	0.01	0.00	4.17
20	0.00	0.02	0.07	0.23	0.45	0.54	1.12	0.86	0.52	0.20	0.10	0.05	0.01	0.00	4.17
21	0.01	0.00	0.08	0.18	0.35	0.63	1.16	0.84	0.53	0.24	0.14	0.01	0.01	0.00	4.17
22	0.01	0.03	0.08	0.19	0.41	0.81	0.94	0.77	0.56	0.23	0.11	0.04	0.00	0.00	4.17
23	0.01	0.05	0.03	0.21	0.46	0.85	0.97	0.68	0.48	0.33	0.06	0.03	0.00	0.00	4.17
24	0.00	0.00	0.06	0.24	0.54	0.73	0.97	0.66	0.59	0.26	0.11	0.02	0.00	0.00	4.17
TOTAL	0.10	0.40	1.34	5.06	10.67	18.21	24.16	19.30	11.89	5.78	2.01	0.80	0.26	0.02	

NUMBER OF OBSERVATIONS 4080

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)												TOTAL		
	≤0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥0.12	MISSING	
1	0.00	0.00	0.02	0.07	0.17	0.44	0.64	0.88	0.98	0.54	0.25	0.12	0.00	0.05	4.17
2	0.00	0.02	0.00	0.07	0.17	0.49	0.51	1.05	0.74	0.61	0.27	0.15	0.02	0.05	4.17
3	0.00	0.02	0.00	0.02	0.25	0.44	0.56	0.91	0.71	0.74	0.29	0.10	0.07	0.05	4.17
4	0.00	0.02	0.00	0.07	0.10	0.42	0.93	0.71	0.76	0.59	0.27	0.22	0.02	0.05	4.17
5	0.00	0.00	0.00	0.12	0.10	0.39	0.74	0.78	0.96	0.51	0.34	0.05	0.12	0.05	4.17
6	0.00	0.00	0.05	0.02	0.12	0.44	0.76	0.51	0.76	0.78	0.37	0.22	0.07	0.05	4.17
7	0.00	0.02	0.00	0.05	0.10	0.44	0.81	0.71	0.86	0.54	0.42	0.12	0.05	0.05	4.17
8	0.00	0.00	0.00	0.02	0.05	0.34	0.81	0.61	1.03	0.83	0.22	0.12	0.07	0.05	4.17
9	0.00	0.02	0.00	0.05	0.07	0.56	0.47	0.76	1.00	0.66	0.32	0.10	0.07	0.07	4.17
10	0.00	0.00	0.02	0.05	0.10	0.49	0.61	0.69	1.00	0.69	0.32	0.12	0.02	0.05	4.17
11	0.00	0.00	0.02	0.02	0.15	0.49	0.71	0.61	1.03	0.56	0.25	0.15	0.12	0.05	4.17
12	0.00	0.02	0.00	0.07	0.15	0.39	0.74	0.78	1.00	0.47	0.34	0.10	0.05	0.05	4.17
13	0.00	0.00	0.00	0.07	0.27	0.37	0.61	0.88	0.83	0.51	0.34	0.17	0.05	0.05	4.17
14	0.00	0.00	0.02	0.07	0.17	0.47	0.81	0.91	0.93	0.39	0.27	0.05	0.02	0.05	4.17
15	0.00	0.00	0.00	0.12	0.22	0.44	0.66	0.93	0.86	0.44	0.32	0.10	0.02	0.05	4.17
16	0.00	0.00	0.02	0.07	0.17	0.42	0.76	0.76	0.93	0.56	0.29	0.07	0.05	0.05	4.17
17	0.00	0.02	0.00	0.05	0.17	0.20	0.78	1.05	0.78	0.66	0.20	0.17	0.02	0.05	4.17
18	0.00	0.00	0.00	0.07	0.22	0.29	0.61	0.76	0.86	0.71	0.42	0.12	0.05	0.05	4.17
19	0.00	0.00	0.05	0.02	0.15	0.32	0.69	0.76	1.03	0.56	0.32	0.12	0.05	0.10	4.17
20	0.00	0.00	0.02	0.10	0.10	0.29	0.66	0.96	0.86	0.76	0.25	0.10	0.02	0.05	4.17
21	0.00	0.00	0.00	0.10	0.20	0.34	0.61	0.81	1.18	0.47	0.32	0.05	0.05	0.05	4.17
22	0.00	0.00	0.00	0.10	0.15	0.34	0.83	0.76	0.96	0.64	0.12	0.15	0.07	0.05	4.17
23	0.00	0.00	0.02	0.02	0.10	0.39	0.78	0.98	0.91	0.51	0.22	0.12	0.05	0.05	4.17
24	0.00	0.00	0.00	0.02	0.17	0.49	0.81	0.69	0.91	0.56	0.25	0.12	0.10	0.05	4.17
TOTAL	0.00	0.15	0.29	1.50	3.60	9.71	16.91	19.26	21.86	14.31	6.96	2.92	1.27	1.25	

Table 560. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. March 1950-1964 (Midway) and March 1959-1964 (O'Hare)

HOUR	NUMBER OF OBSERVATIONS 11160														TOTAL
	≤0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥0.20	MISSING	
1	0.01	0.00	0.09	0.25	0.48	0.92	0.99	0.72	0.39	0.19	0.08	0.03	0.02	0.01	4.17
2	0.02	0.04	0.16	0.19	0.41	1.06	1.04	0.69	0.36	0.11	0.04	0.01	0.04	0.01	4.17
3	0.02	0.05	0.11	0.23	0.52	0.89	1.00	0.75	0.33	0.17	0.06	0.00	0.02	0.01	4.17
4	0.03	0.04	0.05	0.14	0.56	0.76	0.99	0.78	0.43	0.24	0.07	0.04	0.01	0.01	4.17
5	0.02	0.03	0.05	0.21	0.34	0.81	0.95	0.91	0.46	0.26	0.09	0.04	0.00	0.01	4.17
6	0.01	0.01	0.06	0.12	0.36	0.71	0.98	1.03	0.47	0.22	0.13	0.06	0.02	0.01	4.17
7	0.02	0.00	0.06	0.16	0.30	0.83	1.00	0.91	0.44	0.27	0.13	0.03	0.01	0.01	4.17
8	0.02	0.02	0.04	0.12	0.38	0.73	1.23	0.77	0.48	0.22	0.10	0.04	0.03	0.01	4.17
9	0.02	0.04	0.06	0.13	0.41	0.75	1.20	0.82	0.42	0.18	0.08	0.03	0.03	0.00	4.17
10	0.03	0.01	0.09	0.15	0.54	0.82	1.11	0.77	0.33	0.22	0.07	0.01	0.02	0.00	4.17
11	0.02	0.04	0.06	0.26	0.59	0.88	0.99	0.73	0.34	0.17	0.06	0.02	0.02	0.00	4.17
12	0.01	0.05	0.08	0.36	0.53	1.02	0.92	0.69	0.28	0.13	0.04	0.03	0.03	0.00	4.17
13	0.01	0.05	0.12	0.37	0.73	0.97	0.80	0.63	0.23	0.15	0.07	0.02	0.02	0.00	4.17
14	0.02	0.04	0.13	0.36	0.51	1.05	0.91	0.63	0.31	0.10	0.05	0.05	0.01	0.00	4.17
15	0.00	0.01	0.08	0.31	0.64	0.91	1.15	0.47	0.39	0.13	0.03	0.03	0.03	0.00	4.17
16	0.00	0.04	0.09	0.25	0.49	0.95	0.99	0.73	0.35	0.14	0.09	0.03	0.00	0.00	4.17
17	0.02	0.04	0.05	0.21	0.50	0.72	1.16	0.78	0.43	0.16	0.08	0.02	0.00	0.00	4.17
18	0.00	0.02	0.04	0.18	0.44	0.90	1.16	0.84	0.39	0.11	0.10	0.00	0.00	0.00	4.17
19	0.00	0.00	0.04	0.17	0.41	0.97	0.94	0.91	0.49	0.17	0.04	0.01	0.01	0.00	4.17
20	0.00	0.03	0.04	0.14	0.45	0.86	0.97	0.93	0.43	0.22	0.08	0.01	0.01	0.00	4.17
21	0.01	0.01	0.09	0.14	0.45	0.84	1.04	0.81	0.48	0.21	0.05	0.01	0.02	0.01	4.17
22	0.01	0.04	0.03	0.20	0.42	0.82	1.16	0.79	0.41	0.21	0.06	0.03	0.00	0.01	4.17
23	0.03	0.03	0.04	0.26	0.40	0.94	1.05	0.83	0.34	0.14	0.06	0.03	0.01	0.01	4.17
24	0.02	0.04	0.08	0.22	0.48	0.90	1.05	0.71	0.43	0.13	0.07	0.01	0.01	0.01	4.17
TOTAL	0.31	0.65	1.74	5.13	11.35	20.99	24.78	18.64	9.42	4.24	1.75	0.56	0.34	0.11	

HOUR	NUMBER OF OBSERVATIONS 4464														TOTAL
	≤0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥0.12	MISSING	
1	0.00	0.04	0.00	0.09	0.16	0.52	0.49	0.78	0.87	0.63	0.31	0.11	0.11	0.04	4.17
2	0.00	0.00	0.02	0.09	0.18	0.47	0.65	0.74	0.90	0.47	0.43	0.11	0.09	0.02	4.17
3	0.00	0.02	0.02	0.09	0.22	0.36	0.67	0.72	0.96	0.54	0.34	0.13	0.07	0.02	4.17
4	0.02	0.00	0.04	0.07	0.16	0.43	0.49	0.94	1.01	0.49	0.25	0.18	0.07	0.02	4.17
5	0.02	0.02	0.00	0.13	0.18	0.45	0.49	0.78	0.87	0.69	0.29	0.09	0.11	0.02	4.17
6	0.00	0.02	0.04	0.07	0.18	0.22	0.87	0.60	0.87	0.63	0.29	0.20	0.13	0.02	4.17
7	0.00	0.04	0.00	0.11	0.22	0.31	0.58	0.65	0.78	0.83	0.34	0.13	0.13	0.02	4.17
8	0.00	0.00	0.04	0.20	0.16	0.18	0.43	1.03	0.72	0.72	0.36	0.11	0.20	0.02	4.17
9	0.00	0.04	0.02	0.11	0.18	0.27	0.47	0.85	0.90	0.74	0.20	0.22	0.13	0.02	4.17
10	0.02	0.07	0.00	0.04	0.22	0.29	0.54	0.87	0.96	0.56	0.31	0.11	0.13	0.02	4.17
11	0.02	0.00	0.04	0.02	0.20	0.36	0.60	0.81	0.87	0.54	0.40	0.13	0.13	0.02	4.17
12	0.00	0.02	0.00	0.11	0.25	0.22	0.65	0.67	0.74	0.69	0.47	0.16	0.16	0.02	4.17
13	0.00	0.02	0.02	0.11	0.22	0.43	0.49	0.67	0.76	0.69	0.29	0.22	0.20	0.02	4.17
14	0.02	0.00	0.04	0.09	0.16	0.56	0.65	0.63	0.65	0.76	0.38	0.07	0.13	0.02	4.17
15	0.02	0.00	0.00	0.09	0.27	0.38	0.60	0.85	0.78	0.63	0.34	0.07	0.11	0.02	4.17
16	0.00	0.04	0.02	0.04	0.13	0.52	0.43	0.85	0.87	0.65	0.31	0.18	0.09	0.02	4.17
17	0.00	0.00	0.09	0.02	0.31	0.34	0.67	0.47	0.92	0.76	0.34	0.13	0.09	0.02	4.17
18	0.00	0.00	0.07	0.04	0.20	0.31	0.60	0.78	0.96	0.58	0.45	0.09	0.04	0.02	4.17
19	0.00	0.02	0.04	0.07	0.27	0.29	0.74	0.65	1.01	0.54	0.31	0.11	0.09	0.02	4.17
20	0.00	0.00	0.00	0.09	0.31	0.25	0.54	0.99	0.69	0.31	0.13	0.13	0.02	4.17	
21	0.00	0.02	0.00	0.07	0.18	0.52	0.45	0.92	0.81	0.74	0.25	0.11	0.09	0.02	4.17
22	0.00	0.00	0.02	0.09	0.13	0.29	0.52	0.90	0.76	0.92	0.31	0.07	0.13	0.02	4.17
23	0.00	0.04	0.02	0.07	0.16	0.27	0.60	0.92	0.90	0.65	0.34	0.04	0.13	0.02	4.17
24	0.00	0.02	0.09	0.04	0.11	0.38	0.67	0.99	0.74	0.60	0.27	0.11	0.09	0.04	4.17
TOTAL	0.13	0.47	0.67	1.97	4.77	8.60	13.91	19.06	20.32	15.75	7.89	3.05	2.82	0.58	

Table 561. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. April 1950-1964 (Midway) and April 1959-1964 (O'Hare)

NUMBER OF OBSERVATIONS 10800

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤ 0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥ 0.20	MISSING	
1	0.03	0.06	0.15	0.55	0.78	0.99	0.87	0.54	0.16	0.05	0.01	0.00	0.00	0.00	4.17
2	0.01	0.03	0.19	0.49	0.67	1.17	0.83	0.58	0.17	0.02	0.01	0.01	0.00	0.00	4.17
3	0.03	0.02	0.20	0.33	0.77	1.08	0.86	0.59	0.19	0.07	0.01	0.00	0.00	0.00	4.17
4	0.03	0.03	0.15	0.38	0.64	1.10	0.93	0.58	0.24	0.06	0.01	0.01	0.01	0.00	4.17
5	0.03	0.00	0.12	0.36	0.59	0.87	1.07	0.67	0.31	0.10	0.05	0.00	0.00	0.00	4.17
6	0.03	0.05	0.03	0.26	0.56	0.93	1.10	0.71	0.44	0.06	0.01	0.00	0.00	0.00	4.17
7	0.01	0.02	0.06	0.31	0.62	0.90	1.21	0.65	0.26	0.12	0.01	0.00	0.00	0.00	4.17
8	0.04	0.03	0.14	0.24	0.64	1.06	0.97	0.69	0.26	0.08	0.02	0.00	0.00	0.00	4.17
9	0.02	0.04	0.04	0.39	0.74	0.97	1.01	0.65	0.20	0.08	0.01	0.02	0.00	0.00	4.17
10	0.00	0.06	0.15	0.38	0.75	0.96	0.95	0.62	0.21	0.06	0.02	0.00	0.00	0.00	4.17
11	0.02	0.08	0.16	0.50	0.82	0.91	0.84	0.51	0.26	0.06	0.00	0.00	0.01	0.00	4.17
12	0.05	0.04	0.21	0.48	0.85	1.06	0.84	0.35	0.23	0.03	0.02	0.00	0.00	0.00	4.17
13	0.02	0.05	0.23	0.51	0.85	1.06	0.81	0.38	0.15	0.07	0.02	0.00	0.02	0.00	4.17
14	0.01	0.06	0.32	0.58	0.86	0.94	0.74	0.38	0.14	0.06	0.04	0.00	0.02	0.00	4.17
15	0.02	0.02	0.19	0.55	0.87	0.94	0.82	0.46	0.22	0.05	0.03	0.00	0.00	0.00	4.17
16	0.02	0.03	0.12	0.49	0.82	0.96	0.89	0.54	0.24	0.03	0.02	0.01	0.00	0.00	4.17
17	0.01	0.04	0.15	0.39	0.76	1.10	0.89	0.56	0.17	0.06	0.04	0.01	0.00	0.00	4.17
18	0.02	0.05	0.08	0.36	0.80	1.13	0.87	0.58	0.18	0.06	0.04	0.00	0.01	0.00	4.17
19	0.05	0.02	0.09	0.31	0.70	1.03	1.02	0.61	0.27	0.04	0.02	0.00	0.01	0.00	4.17
20	0.02	0.07	0.06	0.23	0.64	0.94	1.21	0.69	0.20	0.09	0.00	0.00	0.00	0.00	4.17
21	0.03	0.02	0.12	0.23	0.72	1.08	1.04	0.68	0.18	0.06	0.02	0.00	0.00	0.00	4.17
22	0.04	0.04	0.14	0.32	0.77	0.93	1.07	0.61	0.17	0.06	0.02	0.00	0.00	0.00	4.17
23	0.04	0.06	0.14	0.31	0.83	0.89	1.06	0.57	0.19	0.06	0.01	0.00	0.01	0.00	4.17
24	0.01	0.01	0.15	0.41	0.81	1.07	0.82	0.68	0.15	0.05	0.00	0.00	0.01	0.00	4.17
TOTAL	0.55	0.91	3.39	9.37	17.88	24.08	22.76	13.88	5.17	1.46	0.41	0.06	0.09	0.00	

NUMBER OF OBSERVATIONS 4320

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤ 0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥ 0.12	MISSING	
1	0.00	0.02	0.02	0.14	0.32	0.72	0.60	0.86	0.72	0.49	0.23	0.00	0.05	0.00	4.17
2	0.00	0.00	0.05	0.14	0.35	0.74	0.67	0.72	0.74	0.49	0.19	0.05	0.05	0.00	4.17
3	0.00	0.02	0.05	0.09	0.42	0.60	0.69	0.81	0.72	0.51	0.14	0.05	0.07	0.00	4.17
4	0.00	0.02	0.05	0.14	0.32	0.67	0.86	0.63	0.72	0.42	0.19	0.16	0.00	0.00	4.17
5	0.00	0.02	0.07	0.23	0.28	0.51	0.69	0.90	0.72	0.39	0.23	0.05	0.07	0.00	4.17
6	0.00	0.02	0.07	0.09	0.23	0.42	0.72	0.83	0.86	0.42	0.32	0.14	0.05	0.00	4.17
7	0.00	0.00	0.02	0.12	0.32	0.39	0.74	0.95	0.53	0.63	0.28	0.16	0.02	0.00	4.17
8	0.00	0.00	0.09	0.16	0.16	0.58	0.53	0.86	0.86	0.53	0.23	0.09	0.07	0.00	4.17
9	0.00	0.00	0.09	0.16	0.25	0.58	0.58	0.76	0.93	0.44	0.19	0.12	0.07	0.00	4.17
10	0.00	0.05	0.07	0.05	0.21	0.63	0.60	0.63	1.00	0.56	0.21	0.14	0.05	0.00	4.17
11	0.00	0.00	0.05	0.23	0.16	0.35	0.86	0.69	0.72	0.72	0.25	0.07	0.07	0.00	4.17
12	0.02	0.00	0.14	0.14	0.21	0.63	0.58	0.86	0.76	0.49	0.19	0.09	0.07	0.00	4.17
13	0.00	0.05	0.07	0.12	0.35	0.49	0.67	0.76	0.74	0.42	0.30	0.09	0.12	0.00	4.17
14	0.02	0.05	0.09	0.16	0.37	0.53	0.69	0.74	0.56	0.53	0.25	0.12	0.05	0.00	4.17
15	0.05	0.00	0.05	0.09	0.39	0.44	0.88	0.67	0.58	0.12	0.14	0.09	0.00	0.00	4.17
16	0.05	0.02	0.02	0.16	0.44	0.46	0.83	0.69	0.69	0.44	0.23	0.12	0.00	0.00	4.17
17	0.02	0.05	0.02	0.07	0.35	0.67	0.72	0.67	0.76	0.46	0.19	0.14	0.05	0.00	4.17
18	0.05	0.00	0.00	0.12	0.32	0.67	0.58	0.69	0.69	0.76	0.14	0.05	0.09	0.00	4.17
19	0.02	0.05	0.14	0.07	0.37	0.49	0.79	0.60	0.83	0.53	0.19	0.05	0.05	0.00	4.17
20	0.00	0.12	0.05	0.07	0.16	0.56	0.69	0.90	0.63	0.56	0.28	0.14	0.02	0.00	4.17
21	0.05	0.00	0.00	0.12	0.19	0.44	0.63	1.00	0.76	0.60	0.21	0.12	0.07	0.00	4.17
22	0.05	0.30	0.05	0.16	0.16	0.37	0.76	0.95	0.79	0.60	0.19	0.05	0.05	0.00	4.17
23	0.02	0.00	0.07	0.05	0.25	0.53	0.88	0.86	0.79	0.46	0.16	0.05	0.05	0.00	4.17
24	0.02	0.00	0.02	0.05	0.32	0.60	0.67	0.79	0.76	0.60	0.28	0.02	0.02	0.00	4.17
TOTAL	0.37	0.49	1.34	2.92	6.92	13.06	16.92	18.82	17.94	12.62	5.16	2.18	1.27	0.00	

Table 562. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. May 1950-1964 (Midway) and May 1959-1964 (O'Hare)

HOUR	NUMBER OF OBSERVATIONS 11160													TOTAL	
	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)														
	≤ 0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥ 0.20	MISSING	TOTAL
1	0.02	0.07	0.17	0.64	1.01	1.00	0.75	0.36	0.11	0.01	0.02	0.00	0.01	0.00	4.17
2	0.03	0.11	0.16	0.47	1.06	1.03	0.75	0.38	0.11	0.04	0.03	0.00	0.02	0.00	4.17
3	0.02	0.09	0.14	0.50	0.94	1.03	0.86	0.39	0.13	0.04	0.00	0.01	0.02	0.00	4.17
4	0.03	0.05	0.11	0.41	0.90	1.09	0.77	0.48	0.22	0.07	0.01	0.02	0.01	0.00	4.17
5	0.03	0.04	0.14	0.33	0.71	1.02	0.94	0.55	0.30	0.06	0.04	0.01	0.01	0.00	4.17
6	0.03	0.04	0.09	0.27	0.72	1.15	0.94	0.55	0.27	0.07	0.03	0.02	0.01	0.00	4.17
7	0.04	0.05	0.08	0.30	0.78	1.07	0.85	0.60	0.30	0.07	0.04	0.00	0.00	0.00	4.17
8	0.04	0.03	0.19	0.45	0.74	1.02	0.82	0.56	0.23	0.06	0.02	0.01	0.00	0.00	4.17
9	0.04	0.07	0.14	0.43	0.97	0.99	0.85	0.44	0.14	0.08	0.01	0.01	0.00	0.00	4.17
10	0.04	0.07	0.18	0.44	0.95	0.98	0.83	0.41	0.16	0.07	0.02	0.01	0.00	0.00	4.17
11	0.07	0.06	0.31	0.55	0.90	0.99	0.68	0.34	0.17	0.08	0.01	0.00	0.01	0.00	4.17
12	0.04	0.06	0.34	0.75	0.91	0.91	0.71	0.30	0.11	0.03	0.02	0.00	0.00	0.00	4.17
13	0.04	0.12	0.25	0.71	0.97	0.98	0.56	0.36	0.12	0.02	0.03	0.01	0.01	0.00	4.17
14	0.08	0.14	0.30	0.73	0.93	0.81	0.64	0.33	0.14	0.04	0.01	0.00	0.01	0.00	4.17
15	0.04	0.12	0.30	0.61	0.99	0.87	0.78	0.27	0.14	0.03	0.01	0.00	0.01	0.00	4.17
16	0.04	0.13	0.29	0.73	0.82	0.87	0.69	0.41	0.13	0.03	0.03	0.00	0.01	0.00	4.17
17	0.06	0.10	0.28	0.78	0.83	0.76	0.78	0.41	0.08	0.06	0.01	0.00	0.01	0.00	4.17
18	0.02	0.08	0.24	0.73	0.85	0.98	0.75	0.32	0.14	0.02	0.02	0.00	0.01	0.00	4.17
19	0.04	0.05	0.21	0.65	0.76	1.08	0.84	0.35	0.13	0.04	0.01	0.00	0.01	0.00	4.17
20	0.04	0.04	0.11	0.48	0.84	1.08	0.91	0.46	0.15	0.04	0.01	0.01	0.01	0.00	4.17
21	0.05	0.05	0.15	0.37	0.86	1.09	0.87	0.49	0.15	0.05	0.00	0.00	0.02	0.00	4.17
22	0.03	0.07	0.09	0.49	1.05	1.02	0.76	0.46	0.14	0.03	0.01	0.01	0.01	0.00	4.17
23	0.04	0.04	0.15	0.59	0.93	1.13	0.68	0.41	0.12	0.04	0.01	0.00	0.01	0.01	4.17
24	0.04	0.04	0.21	0.56	1.11	0.99	0.68	0.39	0.13	0.00	0.01	0.01	0.01	0.00	4.17
TOTAL	0.93	1.72	4.62	12.97	21.53	23.92	18.71	10.01	3.81	1.08	0.37	0.12	0.20	0.01	

HOUR	NUMBER OF OBSERVATIONS 4464													TOTAL	
	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)														
	≤ 0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥ 0.12	MISSING	TOTAL
1	0.04	0.00	0.02	0.07	0.22	0.45	0.83	0.99	0.78	0.49	0.20	0.07	0.00	0.00	4.17
2	0.00	0.00	0.07	0.04	0.27	0.54	0.65	0.96	0.76	0.63	0.20	0.02	0.02	0.00	4.17
3	0.00	0.02	0.00	0.11	0.22	0.49	0.74	0.72	0.96	0.63	0.18	0.07	0.02	0.00	4.17
4	0.00	0.00	0.02	0.09	0.20	0.47	0.96	0.74	0.78	0.47	0.34	0.09	0.00	0.00	4.17
5	0.00	0.00	0.02	0.09	0.22	0.47	0.90	0.90	0.63	0.52	0.18	0.20	0.04	0.00	4.17
6	0.00	0.00	0.02	0.16	0.11	0.45	0.72	0.76	0.74	0.74	0.27	0.20	0.00	0.00	4.17
7	0.00	0.00	0.07	0.09	0.13	0.40	0.81	0.78	0.69	0.65	0.40	0.09	0.04	0.00	4.17
8	0.00	0.02	0.04	0.02	0.20	0.40	0.85	0.74	0.69	0.69	0.25	0.18	0.07	0.00	4.17
9	0.00	0.02	0.02	0.13	0.09	0.56	0.83	0.72	0.87	0.58	0.22	0.09	0.02	0.00	4.17
10	0.00	0.02	0.02	0.02	0.31	0.45	0.83	0.69	0.74	0.69	0.20	0.09	0.07	0.02	4.17
11	0.00	0.00	0.02	0.09	0.18	0.54	0.83	0.72	0.87	0.45	0.36	0.07	0.04	0.00	4.17
12	0.00	0.02	0.02	0.04	0.36	0.60	0.76	0.78	0.67	0.58	0.22	0.04	0.04	0.00	4.17
13	0.00	0.02	0.04	0.09	0.27	0.47	0.78	0.78	0.92	0.49	0.27	0.00	0.02	0.00	4.17
14	0.00	0.00	0.04	0.11	0.31	0.40	0.87	0.76	0.81	0.47	0.29	0.04	0.04	0.00	4.17
15	0.00	0.00	0.02	0.07	0.34	0.63	0.58	0.72	0.92	0.63	0.18	0.09	0.00	0.00	4.17
16	0.00	0.00	0.02	0.16	0.45	0.36	0.69	0.81	0.76	0.65	0.25	0.02	0.00	0.00	4.17
17	0.00	0.00	0.04	0.20	0.40	0.49	0.60	0.74	0.78	0.58	0.25	0.07	0.00	0.00	4.17
18	0.00	0.02	0.00	0.11	0.45	0.49	0.58	0.87	0.87	0.45	0.25	0.02	0.02	0.02	4.17
19	0.00	0.00	0.04	0.13	0.22	0.56	0.65	0.92	0.81	0.45	0.29	0.09	0.00	0.00	4.17
20	0.00	0.02	0.04	0.04	0.20	0.58	0.65	0.87	0.92	0.47	0.27	0.07	0.02	0.00	4.17
21	0.02	0.00	0.04	0.07	0.20	0.49	0.72	0.83	0.67	0.67	0.36	0.07	0.02	0.00	4.17
22	0.00	0.00	0.04	0.07	0.18	0.40	0.90	0.78	0.74	0.67	0.25	0.11	0.02	0.00	4.17
23	0.00	0.02	0.02	0.04	0.25	0.40	0.99	0.74	0.87	0.52	0.22	0.07	0.02	0.00	4.17
24	0.00	0.00	0.04	0.07	0.25	0.40	0.85	0.92	0.65	0.47	0.34	0.11	0.04	0.02	4.17
TOTAL	0.07	0.20	0.78	2.13	6.05	11.51	18.57	19.24	18.93	13.64	6.23	1.97	0.60	0.07	

Table 563. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. June 1950-1964 (Midway) and June 1959-1964 (O'Hare)

HOUR	NUMBER OF OBSERVATIONS 10800													TOTAL
	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													
	≤0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥0.20	MISSING
1	0.05	0.07	0.32	0.68	1.06	0.99	0.56	0.25	0.01	0.00	0.02	0.00	0.00	0.15
2	0.05	0.06	0.34	0.81	0.99	0.99	0.50	0.23	0.03	0.01	0.02	0.00	0.00	0.15
3	0.03	0.05	0.32	0.72	0.92	1.08	0.66	0.15	0.07	0.02	0.00	0.00	0.00	0.15
4	0.05	0.07	0.27	0.59	0.94	0.93	0.81	0.27	0.07	0.01	0.00	0.00	0.00	0.15
5	0.04	0.07	0.17	0.50	0.82	1.00	0.89	0.38	0.08	0.04	0.01	0.00	0.00	0.15
6	0.05	0.04	0.19	0.51	0.77	1.04	0.86	0.42	0.10	0.03	0.01	0.00	0.00	0.16
7	0.06	0.03	0.25	0.49	0.69	1.07	0.86	0.35	0.16	0.04	0.01	0.01	0.00	0.16
8	0.06	0.05	0.26	0.56	0.88	1.05	0.63	0.38	0.12	0.02	0.00	0.00	0.00	0.16
9	0.03	0.05	0.34	0.55	1.04	0.94	0.60	0.34	0.09	0.01	0.01	0.00	0.00	0.15
10	0.05	0.07	0.32	0.63	1.03	0.91	0.63	0.31	0.05	0.00	0.02	0.00	0.00	0.15
11	0.02	0.11	0.39	0.71	1.06	0.81	0.53	0.29	0.08	0.02	0.00	0.00	0.00	0.15
12	0.04	0.13	0.45	0.74	1.06	0.79	0.43	0.28	0.10	0.01	0.01	0.00	0.00	0.14
13	0.07	0.11	0.50	0.77	0.99	0.67	0.59	0.20	0.09	0.02	0.01	0.00	0.00	0.14
14	0.12	0.19	0.38	0.77	0.98	0.73	0.55	0.21	0.05	0.04	0.00	0.00	0.00	0.14
15	0.08	0.21	0.38	0.84	0.90	0.72	0.48	0.29	0.08	0.02	0.00	0.00	0.00	0.15
16	0.04	0.23	0.51	0.80	0.81	0.79	0.56	0.20	0.04	0.04	0.00	0.01	0.00	0.15
17	0.06	0.27	0.44	0.84	0.86	0.81	0.50	0.17	0.05	0.02	0.01	0.00	0.00	0.15
18	0.06	0.13	0.30	0.86	0.96	0.81	0.59	0.18	0.08	0.01	0.02	0.00	0.01	0.15
19	0.04	0.20	0.31	0.83	0.96	0.86	0.56	0.18	0.06	0.00	0.00	0.00	0.01	0.15
20	0.05	0.14	0.31	0.62	0.94	1.00	0.63	0.25	0.06	0.02	0.00	0.00	0.00	0.15
21	0.02	0.09	0.20	0.60	0.99	1.12	0.56	0.36	0.03	0.02	0.03	0.00	0.00	0.15
22	0.05	0.06	0.28	0.57	0.93	1.07	0.64	0.26	0.05	0.01	0.00	0.00	0.02	0.15
23	0.06	0.04	0.30	0.62	1.05	0.94	0.69	0.25	0.07	0.00	0.01	0.00	0.00	0.15
24	0.05	0.07	0.27	0.61	1.05	1.05	0.61	0.22	0.06	0.02	0.01	0.00	0.01	0.15
TOTAL	1.19	2.55	7.81	16.32	22.66	22.16	14.94	6.42	1.69	0.40	0.19	0.02	0.09	3.57

HOUR	NUMBER OF OBSERVATIONS 4320													TOTAL
	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													
	≤0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥0.12	MISSING
1	0.00	0.00	0.02	0.05	0.19	0.37	0.90	1.04	0.97	0.28	0.23	0.07	0.02	0.02
2	0.00	0.00	0.02	0.07	0.21	0.28	0.93	1.11	0.81	0.44	0.21	0.05	0.02	0.02
3	0.00	0.00	0.00	0.05	0.16	0.37	0.95	1.16	0.90	0.32	0.19	0.02	0.02	0.02
4	0.00	0.00	0.00	0.02	0.23	0.37	0.90	0.88	0.95	0.56	0.19	0.02	0.02	0.02
5	0.00	0.00	0.00	0.05	0.09	0.32	0.90	1.02	0.86	0.58	0.28	0.00	0.02	0.05
6	0.00	0.00	0.00	0.02	0.16	0.23	0.79	0.90	1.00	0.69	0.25	0.05	0.02	0.05
7	0.00	0.00	0.00	0.05	0.05	0.35	0.74	1.06	0.81	0.74	0.23	0.07	0.02	0.05
8	0.02	0.00	0.02	0.02	0.12	0.23	0.79	1.06	0.90	0.60	0.23	0.12	0.00	0.05
9	0.00	0.00	0.00	0.05	0.14	0.37	0.95	0.86	0.88	0.53	0.28	0.02	0.07	0.02
10	0.00	0.00	0.02	0.00	0.21	0.39	0.81	0.88	1.09	0.44	0.25	0.05	0.00	0.02
11	0.00	0.00	0.02	0.02	0.09	0.53	0.79	1.00	0.95	0.39	0.23	0.09	0.02	0.02
12	0.00	0.00	0.02	0.02	0.07	0.60	0.95	0.93	0.83	0.28	0.30	0.09	0.05	0.02
13	0.00	0.00	0.00	0.05	0.14	0.46	0.81	1.13	0.86	0.35	0.19	0.14	0.02	0.02
14	0.00	0.00	0.02	0.02	0.32	0.39	0.79	1.02	0.69	0.60	0.14	0.07	0.07	0.02
15	0.00	0.00	0.02	0.05	0.21	0.46	0.81	1.00	0.72	0.56	0.16	0.14	0.02	0.02
16	0.00	0.00	0.02	0.00	0.21	0.46	0.88	1.13	0.79	0.39	0.12	0.09	0.05	0.02
17	0.00	0.02	0.02	0.09	0.14	0.67	0.81	1.09	0.88	0.19	0.14	0.02	0.07	0.02
18	0.00	0.00	0.05	0.00	0.25	0.56	0.97	0.97	0.67	0.32	0.12	0.12	0.02	0.07
19	0.00	0.00	0.02	0.02	0.19	0.53	0.95	1.11	0.69	0.35	0.19	0.09	0.00	0.02
20	0.00	0.00	0.00	0.02	0.09	0.65	0.90	1.09	0.81	0.32	0.16	0.09	0.00	0.02
21	0.00	0.00	0.00	0.02	0.07	0.39	0.79	1.25	0.81	0.42	0.25	0.07	0.07	0.02
22	0.00	0.02	0.00	0.00	0.07	0.42	0.93	0.93	1.02	0.56	0.09	0.07	0.05	0.02
23	0.00	0.00	0.00	0.05	0.09	0.37	0.88	1.02	0.95	0.53	0.21	0.00	0.02	0.07
24	0.00	0.00	0.00	0.02	0.12	0.32	0.88	1.25	0.83	0.32	0.30	0.05	0.05	0.02
TOTAL	0.02	0.05	0.30	0.76	3.61	10.12	20.79	24.88	20.67	10.76	4.93	1.60	0.83	0.67

Table 564. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. July 1950-1964 (Midway) and July 1959-1964 (O'Hare)

NUMBER OF OBSERVATIONS 11160

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤ 0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥ 0.20	MISSING	
1	0.02	0.08	0.19	0.57	1.21	1.15	0.60	0.22	0.07	0.02	0.00	0.00	0.01	0.03	4.17
2	0.04	0.03	0.23	0.62	1.13	1.11	0.72	0.20	0.04	0.02	0.00	0.00	0.01	0.03	4.17
3	0.05	0.04	0.22	0.47	1.20	1.09	0.72	0.23	0.07	0.02	0.00	0.00	0.01	0.04	4.17
4	0.04	0.08	0.19	0.54	0.91	1.10	0.87	0.30	0.08	0.02	0.00	0.01	0.01	0.03	4.17
5	0.04	0.04	0.19	0.39	0.88	1.07	1.01	0.35	0.10	0.06	0.00	0.00	0.01	0.03	4.17
6	0.04	0.03	0.12	0.36	0.82	1.16	0.88	0.50	0.19	0.03	0.00	0.00	0.01	0.03	4.17
7	0.01	0.08	0.15	0.43	0.78	1.07	1.02	0.43	0.13	0.02	0.02	0.00	0.01	0.03	4.17
8	0.02	0.04	0.18	0.47	0.98	1.17	0.87	0.28	0.13	0.02	0.00	0.00	0.01	0.02	4.17
9	0.01	0.06	0.18	0.64	0.92	1.17	0.79	0.27	0.08	0.02	0.00	0.00	0.01	0.02	4.17
10	0.02	0.05	0.25	0.66	1.00	1.02	0.74	0.27	0.10	0.01	0.00	0.00	0.01	0.02	4.17
11	0.01	0.09	0.27	0.75	1.07	0.99	0.64	0.21	0.08	0.03	0.01	0.00	0.01	0.02	4.17
12	0.04	0.10	0.36	0.65	1.16	0.91	0.63	0.24	0.04	0.00	0.00	0.00	0.02	0.02	4.17
13	0.02	0.08	0.32	0.87	1.10	0.98	0.50	0.19	0.04	0.02	0.01	0.00	0.02	0.02	4.17
14	0.06	0.07	0.46	0.84	1.15	0.88	0.47	0.12	0.06	0.03	0.00	0.01	0.00	0.02	4.17
15	0.05	0.13	0.37	0.81	1.16	0.99	0.39	0.18	0.05	0.01	0.01	0.02	0.00	0.02	4.17
16	0.04	0.12	0.34	0.91	1.13	0.89	0.47	0.16	0.07	0.01	0.01	0.01	0.00	0.02	4.17
17	0.05	0.09	0.43	0.78	1.16	0.95	0.47	0.18	0.03	0.01	0.00	0.00	0.00	0.02	4.17
18	0.03	0.09	0.27	0.83	1.16	1.04	0.54	0.13	0.04	0.01	0.01	0.00	0.00	0.02	4.17
19	0.04	0.04	0.25	0.77	1.03	1.16	0.63	0.15	0.04	0.02	0.01	0.00	0.00	0.03	4.17
20	0.05	0.08	0.24	0.47	1.05	1.17	0.73	0.28	0.06	0.01	0.00	0.00	0.00	0.02	4.17
21	0.02	0.04	0.17	0.55	0.90	1.28	0.76	0.36	0.04	0.00	0.03	0.00	0.00	0.02	4.17
22	0.01	0.04	0.17	0.63	0.89	1.31	0.78	0.25	0.06	0.00	0.01	0.00	0.01	0.02	4.17
23	0.03	0.05	0.13	0.65	0.99	1.13	0.81	0.26	0.05	0.01	0.02	0.00	0.01	0.03	4.17
24	0.02	0.04	0.18	0.61	1.19	1.11	0.65	0.26	0.06	0.00	0.00	0.01	0.01	0.02	4.17
TOTAL	0.76	1.60	5.85	15.28	24.95	25.91	16.68	6.01	1.73	0.37	0.13	0.05	0.16	0.52	

NUMBER OF OBSERVATIONS 4464

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤ 0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥ 0.12	MISSING	
1	0.00	0.02	0.04	0.02	0.38	0.27	0.87	0.78	1.05	0.54	0.13	0.04	0.00	0.00	4.17
2	0.00	0.02	0.04	0.07	0.22	0.69	0.54	0.99	1.01	0.36	0.16	0.07	0.00	0.00	4.17
3	0.02	0.04	0.02	0.09	0.25	0.54	0.76	0.83	1.05	0.45	0.11	0.00	0.00	0.00	4.17
4	0.02	0.02	0.02	0.04	0.29	0.52	0.49	1.01	0.99	0.56	0.20	0.00	0.00	0.00	4.17
5	0.00	0.07	0.02	0.04	0.20	0.40	0.60	0.92	1.08	0.56	0.25	0.00	0.02	0.00	4.17
6	0.02	0.07	0.00	0.09	0.13	0.34	0.60	0.83	1.05	0.72	0.20	0.11	0.00	0.00	4.17
7	0.00	0.04	0.02	0.02	0.20	0.29	0.69	0.72	1.34	0.52	0.25	0.04	0.02	0.00	4.17
8	0.00	0.02	0.04	0.04	0.16	0.38	0.63	1.01	0.90	0.76	0.13	0.07	0.02	0.00	4.17
9	0.00	0.04	0.04	0.04	0.20	0.34	0.60	0.96	1.08	0.54	0.27	0.04	0.00	0.00	4.17
10	0.00	0.00	0.07	0.04	0.18	0.38	0.60	1.10	0.99	0.43	0.18	0.13	0.07	0.00	4.17
11	0.00	0.00	0.04	0.04	0.20	0.38	0.58	1.08	1.14	0.34	0.27	0.04	0.04	0.00	4.17
12	0.00	0.00	0.04	0.07	0.20	0.52	0.67	1.10	0.87	0.36	0.25	0.04	0.04	0.00	4.17
13	0.00	0.00	0.07	0.04	0.25	0.43	0.96	0.87	0.87	0.38	0.20	0.04	0.04	0.00	4.17
14	0.00	0.04	0.07	0.11	0.22	0.60	0.76	0.96	0.72	0.38	0.22	0.07	0.00	0.00	4.17
15	0.00	0.04	0.04	0.11	0.25	0.56	0.78	1.12	0.67	0.36	0.16	0.04	0.02	0.00	4.17
16	0.00	0.00	0.07	0.18	0.31	0.47	0.63	1.14	0.83	0.31	0.20	0.02	0.00	0.00	4.17
17	0.00	0.02	0.07	0.07	0.47	0.54	0.83	0.90	0.76	0.40	0.11	0.00	0.00	0.00	4.17
18	0.00	0.00	0.02	0.22	0.20	0.60	0.92	0.94	0.87	0.25	0.07	0.04	0.02	0.00	4.17
19	0.02	0.00	0.04	0.07	0.27	0.54	0.85	1.23	0.69	0.31	0.13	0.00	0.00	0.00	4.17
20	0.00	0.00	0.04	0.11	0.20	0.65	0.78	1.03	0.92	0.27	0.13	0.00	0.02	0.00	4.17
21	0.00	0.00	0.04	0.09	0.13	0.52	0.74	1.10	0.92	0.45	0.13	0.00	0.04	0.00	4.17
22	0.00	0.00	0.02	0.13	0.31	0.25	0.65	1.28	0.87	0.31	0.31	0.00	0.02	0.00	4.17
23	0.00	0.00	0.02	0.07	0.18	0.47	0.58	1.21	0.92	0.49	0.20	0.02	0.00	0.00	4.17
24	0.00	0.04	0.04	0.02	0.16	0.49	0.58	1.12	1.12	0.40	0.16	0.00	0.02	0.00	4.17
TOTAL	0.09	0.52	0.99	1.86	5.58	11.16	16.73	24.22	22.72	10.44	4.44	0.85	0.43	0.00	

Table 565. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. August 1950-1964 (Midway) and August 1959-1964 (O'Hare)

NUMBER OF OBSERVATIONS 11161

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)												MISSING	TOTAL	
	≤0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥0.20		
1	0.01	0.02	0.34	0.62	1.16	1.07	0.65	0.24	0.04	0.02	0.00	0.01	0.00	0.00	4.17
2	0.03	0.09	0.27	0.61	1.06	1.14	0.65	0.25	0.07	0.01	0.00	0.00	0.00	0.00	4.18
3	0.02	0.06	0.28	0.61	1.02	0.97	0.83	0.30	0.07	0.01	0.00	0.00	0.00	0.00	4.17
4	0.03	0.08	0.22	0.59	0.86	1.06	0.86	0.39	0.07	0.02	0.00	0.00	0.00	0.00	4.17
5	0.02	0.06	0.20	0.50	0.85	1.08	0.85	0.43	0.16	0.00	0.02	0.00	0.00	0.00	4.17
6	0.02	0.01	0.17	0.35	0.91	1.10	0.94	0.44	0.18	0.02	0.01	0.00	0.02	0.00	4.17
7	0.02	0.03	0.17	0.39	0.93	1.09	0.89	0.43	0.22	0.00	0.00	0.00	0.00	0.00	4.17
8	0.04	0.01	0.19	0.52	1.02	1.19	0.73	0.30	0.15	0.01	0.00	0.00	0.01	0.00	4.17
9	0.01	0.02	0.25	0.62	0.88	1.28	0.77	0.22	0.11	0.01	0.00	0.00	0.00	0.00	4.17
10	0.01	0.04	0.32	0.61	1.03	1.08	0.65	0.26	0.12	0.03	0.00	0.01	0.01	0.00	4.17
11	0.02	0.04	0.32	0.73	1.12	1.16	0.48	0.23	0.05	0.02	0.00	0.00	0.00	0.00	4.17
12	0.02	0.09	0.30	0.92	1.03	0.99	0.55	0.21	0.06	0.00	0.00	0.00	0.00	0.00	4.17
13	0.04	0.15	0.45	0.79	1.11	0.81	0.51	0.22	0.04	0.04	0.00	0.00	0.00	0.00	4.17
14	0.03	0.12	0.60	0.84	1.10	0.79	0.46	0.16	0.07	0.00	0.00	0.00	0.00	0.00	4.17
15	0.03	0.14	0.44	0.97	0.99	0.97	0.40	0.19	0.03	0.01	0.00	0.00	0.00	0.00	4.17
16	0.03	0.09	0.52	0.86	1.07	0.88	0.47	0.17	0.06	0.01	0.01	0.00	0.00	0.00	4.17
17	0.02	0.11	0.45	0.99	1.07	0.89	0.46	0.12	0.07	0.01	0.00	0.00	0.00	0.00	4.17
18	0.04	0.13	0.35	0.79	1.25	0.94	0.39	0.21	0.05	0.00	0.01	0.00	0.00	0.00	4.17
19	0.04	0.13	0.39	0.73	1.08	1.08	0.51	0.17	0.03	0.02	0.01	0.00	0.00	0.00	4.17
20	0.00	0.12	0.27	0.69	1.00	1.08	0.68	0.23	0.08	0.02	0.00	0.00	0.00	0.00	4.17
21	0.00	0.05	0.22	0.62	1.09	0.98	0.82	0.32	0.05	0.01	0.00	0.00	0.00	0.00	4.17
22	0.01	0.06	0.21	0.61	1.00	1.14	0.78	0.28	0.07	0.01	0.00	0.00	0.00	0.00	4.17
23	0.00	0.06	0.17	0.68	0.91	1.21	0.71	0.35	0.06	0.01	0.00	0.00	0.00	0.00	4.17
24	0.01	0.04	0.22	0.72	1.01	1.12	0.66	0.28	0.11	0.00	0.00	0.00	0.00	0.00	4.17
TOTAL	0.47	1.76	7.30	16.33	24.58	25.06	15.71	6.39	2.04	0.26	0.05	0.02	0.04	0.00	

NUMBER OF OBSERVATIONS 4465

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)												MISSING	TOTAL	
	≤0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥0.12		
1	0.00	0.00	0.00	0.07	0.22	0.56	0.83	1.03	0.65	0.58	0.16	0.02	0.02	0.02	4.17
2	0.00	0.02	0.04	0.07	0.13	0.54	0.83	1.10	0.92	0.29	0.13	0.09	0.02	0.00	4.19
3	0.00	0.00	0.04	0.07	0.13	0.47	0.94	1.03	0.78	0.52	0.16	0.02	0.00	0.00	4.17
4	0.02	0.00	0.04	0.11	0.22	0.40	0.85	1.01	0.81	0.43	0.25	0.00	0.02	0.00	4.17
5	0.00	0.00	0.02	0.16	0.20	0.38	0.78	1.01	0.83	0.47	0.27	0.04	0.00	0.00	4.17
6	0.00	0.00	0.00	0.09	0.18	0.25	0.60	1.10	0.85	0.69	0.25	0.09	0.07	0.00	4.17
7	0.02	0.00	0.00	0.04	0.20	0.38	0.67	0.87	0.85	0.78	0.27	0.04	0.02	0.00	4.17
8	0.00	0.00	0.02	0.11	0.20	0.36	0.72	0.92	1.08	0.49	0.22	0.04	0.00	0.00	4.17
9	0.00	0.00	0.04	0.09	0.20	0.38	0.60	1.05	1.12	0.40	0.20	0.07	0.00	0.00	4.17
10	0.00	0.00	0.00	0.09	0.29	0.43	0.58	1.08	0.94	0.45	0.22	0.07	0.02	0.00	4.17
11	0.00	0.02	0.02	0.04	0.16	0.49	0.67	1.05	0.87	0.54	0.27	0.02	0.00	0.00	4.17
12	0.00	0.02	0.02	0.07	0.22	0.56	0.81	1.03	0.87	0.40	0.13	0.02	0.00	0.00	4.17
13	0.00	0.00	0.02	0.04	0.29	0.49	0.81	1.01	0.78	0.49	0.20	0.02	0.00	0.00	4.17
14	0.00	0.02	0.04	0.09	0.16	0.58	1.03	0.90	0.67	0.52	0.13	0.02	0.00	0.00	4.17
15	0.02	0.02	0.00	0.11	0.13	0.72	1.05	0.92	0.58	0.54	0.04	0.00	0.02	0.00	4.17
16	0.00	0.00	0.04	0.13	0.29	0.49	0.99	1.03	0.56	0.49	0.09	0.02	0.02	0.00	4.17
17	0.00	0.04	0.07	0.25	0.60	0.92	1.08	0.76	0.25	0.07	0.09	0.04	0.00	0.00	4.17
18	0.00	0.00	0.02	0.18	0.18	0.60	0.85	1.08	0.65	0.36	0.16	0.09	0.00	0.00	4.17
19	0.02	0.00	0.04	0.07	0.25	0.63	0.96	0.99	0.72	0.36	0.11	0.02	0.00	0.00	4.17
20	0.00	0.02	0.04	0.16	0.29	0.47	0.69	1.08	0.85	0.29	0.20	0.07	0.00	0.00	4.17
21	0.00	0.00	0.04	0.09	0.22	0.34	0.72	1.08	0.90	0.52	0.25	0.02	0.00	0.00	4.17
22	0.00	0.00	0.00	0.11	0.25	0.34	0.83	0.90	1.01	0.49	0.25	0.00	0.00	0.00	4.17
23	0.00	0.00	0.00	0.16	0.20	0.34	0.63	1.14	0.99	0.43	0.25	0.04	0.00	0.00	4.17
24	0.00	0.00	0.00	0.09	0.20	0.43	0.56	1.16	0.83	0.56	0.29	0.04	0.00	0.00	4.17
TOTAL	0.09	0.13	0.58	2.31	5.08	11.22	18.92	24.61	19.87	11.33	4.57	0.99	0.27	0.02	

Table 566. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. September 1950-1964 (Midway) and September 1959-1964 (O'Hare)

HOUR	NUMBER OF OBSERVATIONS 10800													TOTAL	
	≤ 0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥ 0.20	MISSING	
1	0.02	0.01	0.15	0.48	0.81	0.99	1.05	0.46	0.16	0.04	0.01	0.00	0.00	0.00	4.17
2	0.02	0.05	0.08	0.45	0.88	0.94	1.06	0.49	0.15	0.04	0.01	0.01	0.00	0.00	4.17
3	0.01	0.02	0.09	0.47	0.73	0.99	0.97	0.56	0.23	0.05	0.02	0.01	0.00	0.01	4.17
4	0.00	0.01	0.11	0.37	0.73	0.89	1.08	0.58	0.31	0.06	0.01	0.00	0.00	0.00	4.17
5	0.01	0.01	0.06	0.33	0.58	0.82	1.07	0.69	0.47	0.06	0.03	0.01	0.00	0.00	4.17
6	0.00	0.01	0.06	0.23	0.56	0.91	1.00	0.80	0.44	0.11	0.03	0.04	0.00	0.00	4.17
7	0.01	0.02	0.08	0.23	0.57	0.91	1.24	0.69	0.32	0.06	0.01	0.02	0.00	0.00	4.17
8	0.00	0.02	0.07	0.28	0.60	1.08	0.97	0.82	0.23	0.04	0.04	0.00	0.01	0.00	4.17
9	0.01	0.00	0.11	0.37	0.73	0.88	1.10	0.67	0.17	0.11	0.01	0.00	0.01	0.00	4.17
10	0.00	0.06	0.15	0.43	0.73	1.06	0.98	0.57	0.12	0.03	0.02	0.00	0.01	0.00	4.17
11	0.04	0.03	0.21	0.59	0.87	0.99	0.89	0.37	0.14	0.03	0.00	0.01	0.00	0.00	4.17
12	0.05	0.06	0.19	0.62	0.99	0.97	0.81	0.34	0.10	0.02	0.01	0.00	0.00	0.00	4.17
13	0.06	0.06	0.39	0.56	0.97	1.03	0.71	0.28	0.09	0.01	0.01	0.01	0.00	0.00	4.17
14	0.05	0.04	0.39	0.61	0.98	1.04	0.67	0.31	0.09	0.00	0.00	0.00	0.00	0.00	4.17
15	0.05	0.08	0.21	0.62	1.03	1.06	0.65	0.34	0.11	0.02	0.00	0.00	0.00	0.00	4.17
16	0.03	0.09	0.23	0.64	0.94	1.06	0.69	0.36	0.08	0.04	0.00	0.00	0.00	0.00	4.17
17	0.04	0.04	0.19	0.59	0.94	1.17	0.78	0.31	0.08	0.02	0.01	0.00	0.00	0.00	4.17
18	0.02	0.04	0.16	0.51	1.01	0.94	1.06	0.31	0.11	0.02	0.01	0.00	0.00	0.00	4.17
19	0.01	0.04	0.15	0.49	0.81	0.99	1.03	0.45	0.17	0.03	0.00	0.00	0.00	0.00	4.17
20	0.00	0.02	0.08	0.33	0.81	1.11	1.06	0.50	0.18	0.06	0.00	0.00	0.00	0.00	4.17
21	0.01	0.01	0.13	0.29	0.84	1.02	1.06	0.57	0.18	0.04	0.00	0.02	0.00	0.00	4.17
22	0.00	0.03	0.11	0.37	0.80	1.05	1.06	0.52	0.20	0.02	0.01	0.00	0.00	0.00	4.17
23	0.01	0.02	0.13	0.43	0.74	1.15	0.94	0.47	0.23	0.01	0.02	0.00	0.00	0.02	4.17
24	0.00	0.04	0.13	0.41	0.65	1.11	0.97	0.60	0.19	0.06	0.00	0.02	0.00	0.00	4.17
TOTAL	0.42	0.79	3.69	10.70	19.31	24.15	22.92	12.09	4.56	0.95	0.24	0.14	0.03	0.03	

HOUR	NUMBER OF OBSERVATIONS 4320													TOTAL	
	≤ 0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥ 0.12	MISSING	
1	0.02	0.00	0.00	0.05	0.23	0.42	0.69	0.83	1.11	0.65	0.14	0.02	0.00	0.00	4.17
2	0.02	0.00	0.02	0.02	0.16	0.32	0.88	0.88	0.90	0.76	0.16	0.02	0.00	0.00	4.17
3	0.02	0.00	0.02	0.02	0.19	0.44	0.63	1.06	1.11	0.51	0.14	0.02	0.00	0.00	4.17
4	0.00	0.02	0.00	0.05	0.14	0.49	0.65	0.83	1.09	0.60	0.21	0.09	0.00	0.00	4.17
5	0.00	0.00	0.05	0.00	0.16	0.39	0.58	0.97	0.93	0.69	0.28	0.09	0.02	0.00	4.17
6	0.00	0.00	0.00	0.02	0.16	0.32	0.69	0.63	0.90	1.04	0.35	0.02	0.02	0.00	4.17
7	0.00	0.00	0.02	0.02	0.12	0.32	0.53	0.88	1.04	0.74	0.35	0.12	0.02	0.00	4.17
8	0.00	0.00	0.00	0.09	0.12	0.35	0.60	0.95	0.97	0.81	0.19	0.07	0.02	0.00	4.17
9	0.00	0.00	0.00	0.12	0.16	0.28	0.74	0.83	1.00	0.69	0.25	0.07	0.02	0.00	4.17
10	0.00	0.00	0.05	0.05	0.25	0.25	0.69	0.72	1.23	0.60	0.23	0.07	0.02	0.00	4.17
11	0.00	0.00	0.05	0.07	0.14	0.46	0.60	1.18	0.79	0.58	0.23	0.07	0.00	0.00	4.17
12	0.00	0.00	0.02	0.12	0.12	0.49	0.90	0.90	0.86	0.44	0.25	0.07	0.00	0.00	4.17
13	0.00	0.07	0.00	0.12	0.23	0.28	0.74	1.09	0.67	0.67	0.21	0.07	0.02	0.00	4.17
14	0.00	0.00	0.02	0.21	0.25	0.39	0.67	1.02	0.90	0.44	0.21	0.02	0.00	0.02	4.17
15	0.02	0.02	0.02	0.12	0.23	0.42	0.88	1.04	0.67	0.39	0.23	0.12	0.00	0.00	4.17
16	0.02	0.00	0.05	0.14	0.23	0.44	0.76	1.02	0.72	0.39	0.35	0.05	0.00	0.00	4.17
17	0.00	0.02	0.02	0.07	0.23	0.53	0.74	1.06	0.76	0.37	0.25	0.07	0.02	0.00	4.17
18	0.00	0.00	0.02	0.07	0.14	0.42	0.88	1.13	0.74	0.49	0.21	0.02	0.02	0.02	4.17
19	0.00	0.05	0.02	0.05	0.21	0.60	0.79	0.95	0.83	0.37	0.28	0.02	0.00	0.00	4.17
20	0.00	0.00	0.02	0.07	0.09	0.51	0.65	0.97	1.00	0.67	0.12	0.05	0.02	0.00	4.17
21	0.00	0.02	0.00	0.02	0.12	0.42	0.67	1.13	0.93	0.58	0.19	0.05	0.05	0.00	4.17
22	0.00	0.00	0.00	0.07	0.19	0.39	0.83	0.81	0.97	0.69	0.19	0.00	0.02	0.00	4.17
23	0.00	0.02	0.00	0.09	0.25	0.25	0.81	1.00	1.02	0.49	0.19	0.02	0.02	0.00	4.17
24	0.05	0.00	0.00	0.05	0.14	0.37	0.65	1.11	1.04	0.53	0.21	0.00	0.02	0.00	4.17
TOTAL	0.16	0.23	0.42	1.69	4.26	9.56	17.27	23.01	22.18	14.21	5.39	1.23	0.35	0.05	

Table 567. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. October 1950-1964 (Midway) and October 1959-1964 (O'Hare)

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥0.20	MISSING	
1	0.00	0.02	0.15	0.39	0.80	0.83	0.96	0.61	0.31	0.07	0.01	0.00	0.01	0.00	4.17
2	0.00	0.02	0.21	0.36	0.78	1.00	0.91	0.54	0.28	0.05	0.02	0.00	0.00	0.00	4.17
3	0.01	0.06	0.16	0.30	0.69	1.03	0.83	0.62	0.31	0.11	0.03	0.01	0.00	0.00	4.17
4	0.00	0.04	0.10	0.36	0.62	0.90	0.98	0.65	0.35	0.12	0.04	0.02	0.00	0.00	4.17
5	0.01	0.04	0.11	0.31	0.54	0.86	1.07	0.56	0.37	0.18	0.09	0.02	0.01	0.00	4.17
6	0.01	0.04	0.13	0.28	0.52	0.84	1.02	0.62	0.40	0.15	0.07	0.02	0.00	0.05	4.17
7	0.01	0.04	0.07	0.24	0.50	0.85	0.90	0.82	0.46	0.13	0.07	0.03	0.00	0.05	4.17
8	0.03	0.03	0.07	0.24	0.47	0.94	1.02	0.73	0.36	0.21	0.04	0.00	0.01	0.01	4.17
9	0.02	0.04	0.12	0.25	0.63	0.98	0.92	0.68	0.39	0.11	0.04	0.00	0.00	0.01	4.17
10	0.03	0.03	0.15	0.36	0.64	1.14	0.81	0.71	0.20	0.09	0.02	0.00	0.00	0.01	4.17
11	0.03	0.04	0.17	0.56	0.81	0.94	0.82	0.54	0.16	0.07	0.01	0.00	0.01	0.01	4.17
12	0.02	0.06	0.25	0.59	1.08	0.91	0.68	0.39	0.13	0.05	0.00	0.00	0.00	0.01	4.17
13	0.03	0.07	0.30	0.48	1.15	0.78	0.77	0.40	0.12	0.04	0.03	0.00	0.00	0.01	4.17
14	0.04	0.09	0.16	0.66	0.89	1.03	0.72	0.40	0.14	0.02	0.01	0.00	0.00	0.00	4.17
15	0.04	0.06	0.09	0.55	1.04	1.08	0.73	0.38	0.19	0.02	0.00	0.00	0.00	0.00	4.17
16	0.05	0.01	0.12	0.39	1.20	0.88	0.84	0.44	0.19	0.04	0.01	0.00	0.00	0.00	4.17
17	0.04	0.05	0.12	0.47	0.90	0.95	0.79	0.50	0.19	0.06	0.02	0.00	0.00	0.08	4.17
18	0.03	0.04	0.08	0.30	0.88	0.94	0.90	0.64	0.21	0.08	0.00	0.00	0.01	0.07	4.17
19	0.05	0.04	0.09	0.26	0.84	1.02	1.02	0.56	0.22	0.04	0.00	0.00	0.01	0.00	4.17
20	0.04	0.04	0.11	0.41	0.69	0.99	0.90	0.69	0.21	0.09	0.01	0.00	0.01	0.00	4.17
TOTAL	0.60	1.08	3.23	9.07	18.56	22.94	21.49	13.89	6.17	1.93	0.56	0.12	0.06	0.31	

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥0.12	MISSING	
1	0.00	0.00	0.02	0.09	0.29	0.36	0.92	0.90	0.99	0.49	0.09	0.00	0.02	0.00	4.17
2	0.00	0.00	0.00	0.16	0.22	0.38	0.85	1.05	0.83	0.63	0.02	0.02	0.00	0.00	4.17
3	0.00	0.00	0.11	0.09	0.29	0.43	0.81	1.10	0.81	0.36	0.13	0.04	0.00	0.00	4.17
4	0.00	0.00	0.02	0.22	0.22	0.54	0.74	0.94	0.87	0.47	0.11	0.02	0.00	0.00	4.17
5	0.00	0.00	0.02	0.11	0.34	0.45	0.65	0.99	1.05	0.40	0.16	0.00	0.00	0.00	4.17
6	0.00	0.00	0.04	0.11	0.29	0.38	0.60	1.14	0.83	0.56	0.18	0.02	0.00	0.00	4.17
7	0.00	0.00	0.00	0.09	0.31	0.47	0.58	1.12	0.99	0.45	0.13	0.00	0.02	0.00	4.17
8	0.00	0.00	0.04	0.07	0.20	0.34	0.76	1.16	0.99	0.47	0.09	0.02	0.00	0.00	4.17
9	0.00	0.00	0.07	0.04	0.16	0.31	0.94	1.05	0.87	0.60	0.11	0.00	0.00	0.00	4.17
10	0.00	0.00	0.07	0.11	0.13	0.43	0.81	1.10	0.83	0.49	0.20	0.00	0.00	0.00	4.17
11	0.00	0.00	0.04	0.11	0.20	0.40	0.83	0.94	0.81	0.63	0.18	0.02	0.00	0.00	4.17
12	0.00	0.00	0.00	0.16	0.27	0.40	0.94	0.76	0.99	0.49	0.13	0.02	0.00	0.00	4.17
13	0.00	0.00	0.07	0.11	0.29	0.29	0.87	1.05	0.94	0.43	0.09	0.02	0.00	0.00	4.17
14	0.00	0.02	0.09	0.11	0.22	0.47	0.99	1.01	0.76	0.38	0.07	0.04	0.00	0.00	4.17
15	0.00	0.00	0.07	0.11	0.29	0.52	1.08	0.90	0.76	0.29	0.13	0.02	0.00	0.00	4.17
16	0.02	0.02	0.07	0.09	0.20	0.58	0.83	0.99	0.92	0.36	0.02	0.07	0.00	0.00	4.17
17	0.02	0.00	0.07	0.09	0.29	0.52	0.96	1.01	0.74	0.27	0.18	0.00	0.00	0.02	4.17
18	0.02	0.00	0.04	0.09	0.34	0.47	0.83	1.05	0.87	0.34	0.11	0.00	0.00	0.00	4.17
19	0.00	0.02	0.04	0.13	0.25	0.45	0.74	1.14	0.85	0.40	0.09	0.04	0.00	0.00	4.17
20	0.00	0.02	0.02	0.13	0.29	0.45	0.69	1.05	0.92	0.40	0.16	0.02	0.00	0.00	4.17
21	0.00	0.02	0.04	0.13	0.18	0.47	0.67	1.10	0.92	0.47	0.11	0.04	0.00	0.00	4.17
22	0.00	0.02	0.09	0.07	0.29	0.29	0.74	0.85	1.05	0.67	0.07	0.00	0.02	0.00	4.17
23	0.00	0.00	0.13	0.09	0.22	0.38	0.69	0.90	1.08	0.47	0.18	0.02	0.00	0.00	4.17
24	0.00	0.02	0.07	0.25	0.20	0.52	0.74	0.76	0.92	0.56	0.11	0.02	0.00	0.00	4.17
TOTAL	0.07	0.16	1.25	2.78	6.00	10.28	19.27	24.06	21.57	11.09	2.87	0.49	0.09	0.02	

Table 568. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. November 1950-1964 (Midway) and November 1958-1964 (O'Hare)

HOUR	NUMBER OF OBSERVATIONS 10800													TOTAL	
	≤ 0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥ 0.20	MISSING	
1	0.03	0.04	0.11	0.26	0.69	1.02	0.81	0.62	0.36	0.17	0.04	0.00	0.02	0.00	4.17
2	0.01	0.03	0.06	0.34	0.66	1.00	0.90	0.46	0.45	0.19	0.04	0.01	0.02	0.00	4.17
3	0.02	0.02	0.06	0.29	0.80	0.94	0.83	0.58	0.39	0.19	0.03	0.01	0.01	0.00	4.17
4	0.04	0.01	0.11	0.25	0.67	0.93	0.84	0.60	0.40	0.22	0.06	0.03	0.01	0.00	4.17
5	0.02	0.03	0.10	0.27	0.54	0.95	0.87	0.60	0.49	0.13	0.14	0.01	0.02	0.00	4.17
6	0.02	0.02	0.08	0.23	0.59	0.96	0.84	0.59	0.41	0.22	0.12	0.06	0.02	0.00	4.17
7	0.04	0.02	0.07	0.23	0.52	0.91	0.86	0.60	0.47	0.31	0.11	0.02	0.01	0.00	4.17
8	0.01	0.04	0.05	0.19	0.54	0.82	1.00	0.65	0.43	0.27	0.14	0.00	0.04	0.00	4.17
9	0.01	0.03	0.06	0.31	0.62	0.75	0.98	0.70	0.40	0.20	0.06	0.03	0.02	0.00	4.17
10	0.02	0.03	0.08	0.31	0.60	0.99	0.82	0.64	0.45	0.18	0.02	0.02	0.01	0.00	4.17
11	0.02	0.09	0.10	0.43	0.79	0.99	0.89	0.55	0.23	0.06	0.01	0.00	0.02	0.00	4.17
12	0.04	0.08	0.15	0.52	0.87	1.06	0.75	0.47	0.16	0.05	0.00	0.00	0.03	0.00	4.17
13	0.01	0.04	0.20	0.50	0.87	0.90	0.83	0.55	0.21	0.04	0.00	0.01	0.01	0.00	4.17
14	0.03	0.03	0.17	0.44	0.88	1.09	0.75	0.48	0.20	0.07	0.02	0.01	0.00	0.00	4.17
15	0.03	0.06	0.11	0.35	0.76	1.04	0.94	0.44	0.30	0.09	0.04	0.01	0.01	0.00	4.17
16	0.05	0.03	0.08	0.32	0.74	1.05	0.94	0.49	0.29	0.12	0.06	0.00	0.01	0.00	4.17
17	0.03	0.03	0.05	0.32	0.67	1.07	0.88	0.53	0.35	0.19	0.05	0.00	0.01	0.00	4.17
18	0.06	0.03	0.04	0.13	0.61	0.95	1.01	0.79	0.33	0.16	0.05	0.01	0.01	0.00	4.17
19	0.02	0.03	0.07	0.18	0.74	0.90	1.05	0.69	0.38	0.08	0.03	0.00	0.01	0.00	4.17
20	0.03	0.06	0.05	0.26	0.73	0.84	0.98	0.71	0.33	0.12	0.05	0.00	0.01	0.00	4.17
21	0.01	0.03	0.14	0.20	0.64	0.87	1.01	0.68	0.42	0.13	0.03	0.01	0.01	0.00	4.17
22	0.02	0.05	0.06	0.26	0.56	0.91	1.12	0.65	0.36	0.15	0.01	0.01	0.01	0.00	4.17
23	0.01	0.04	0.07	0.23	0.58	1.03	0.96	0.68	0.43	0.11	0.01	0.01	0.01	0.00	4.17
24	0.01	0.04	0.10	0.29	0.63	1.02	0.81	0.71	0.42	0.10	0.02	0.00	0.02	0.00	4.17
TOTAL	0.55	0.86	2.19	7.11	16.30	22.99	21.69	14.45	8.66	3.54	1.10	0.24	0.32	0.00	

HOUR	NUMBER OF OBSERVATIONS 5040													TOTAL	
	≤ 0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥ 0.12	MISSING	
1	0.02	0.00	0.02	0.10	0.40	0.46	1.01	1.03	0.67	0.32	0.08	0.02	0.02	0.02	4.17
2	0.02	0.00	0.08	0.06	0.32	0.62	0.83	0.85	0.83	0.34	0.16	0.02	0.04	0.00	4.17
3	0.00	0.00	0.04	0.08	0.42	0.48	0.73	1.15	0.73	0.38	0.08	0.06	0.02	0.00	4.17
4	0.00	0.00	0.08	0.16	0.30	0.58	0.75	1.05	0.72	0.42	0.04	0.06	0.00	0.00	4.17
5	0.00	0.00	0.06	0.18	0.28	0.52	0.81	0.89	1.01	0.28	0.06	0.06	0.02	0.00	4.17
6	0.00	0.00	0.08	0.12	0.40	0.42	0.91	0.83	0.97	0.32	0.10	0.02	0.00	0.00	4.17
7	0.00	0.00	0.00	0.14	0.48	0.54	0.79	0.95	0.87	0.30	0.08	0.02	0.00	0.00	4.17
8	0.00	0.02	0.06	0.08	0.24	0.54	0.81	1.03	0.85	0.38	0.14	0.00	0.02	0.00	4.17
9	0.00	0.02	0.02	0.10	0.36	0.52	0.91	0.81	0.95	0.34	0.10	0.02	0.02	0.00	4.17
10	0.00	0.00	0.04	0.10	0.26	0.60	0.83	0.97	0.89	0.22	0.18	0.06	0.02	0.00	4.17
11	0.00	0.02	0.02	0.16	0.28	0.50	0.77	1.17	0.71	0.38	0.06	0.06	0.04	0.00	4.17
12	0.04	0.04	0.02	0.12	0.42	0.56	0.91	1.15	0.52	0.30	0.08	0.02	0.00	0.00	4.17
13	0.00	0.04	0.06	0.12	0.36	0.56	0.99	1.05	0.56	0.24	0.12	0.08	0.00	0.00	4.17
14	0.00	0.02	0.02	0.16	0.34	0.63	1.11	1.01	0.56	0.18	0.14	0.00	0.00	0.00	4.17
15	0.00	0.04	0.06	0.10	0.30	0.83	0.93	0.93	0.65	0.26	0.04	0.00	0.02	0.00	4.17
16	0.02	0.04	0.02	0.06	0.30	0.60	1.13	0.85	0.81	0.26	0.04	0.04	0.00	0.00	4.17
17	0.00	0.06	0.06	0.04	0.16	0.69	0.99	1.07	0.63	0.34	0.10	0.02	0.00	0.00	4.17
18	0.02	0.00	0.02	0.08	0.18	0.56	0.89	1.03	0.81	0.42	0.12	0.00	0.04	0.00	4.17
19	0.00	0.02	0.06	0.14	0.46	0.95	1.19	0.79	0.30	0.10	0.06	0.04	0.00	0.00	4.17
20	0.02	0.02	0.00	0.06	0.18	0.54	0.77	1.21	0.77	0.40	0.12	0.04	0.04	0.00	4.17
21	0.00	0.00	0.02	0.08	0.18	0.69	0.81	0.97	0.83	0.38	0.10	0.06	0.04	0.00	4.17
22	0.04	0.00	0.02	0.02	0.24	0.56	0.73	1.11	0.87	0.36	0.12	0.06	0.04	0.00	4.17
23	0.00	0.02	0.02	0.02	0.24	0.65	0.75	1.21	0.71	0.38	0.12	0.02	0.02	0.00	4.17
24	0.00	0.02	0.02	0.04	0.28	0.71	0.62	1.09	0.91	0.28	0.14	0.04	0.00	0.02	4.17
TOTAL	0.18	0.38	0.89	2.22	7.00	13.77	20.79	24.64	18.69	7.72	2.40	0.83	0.44	0.04	

Table 569. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. December 1950-1964 (Midway) and December 1958-1964 (O'Hare)

NUMBER OF OBSERVATIONS 11160

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)												TOTAL	
	≤0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	≥0.20	
1	0.01	0.04	0.06	0.22	0.47	0.96	0.91	0.73	0.49	0.18	0.08	0.01	0.01	0.00
2	0.00	0.01	0.04	0.25	0.41	0.77	1.01	0.69	0.55	0.26	0.13	0.04	0.01	0.00
3	0.00	0.01	0.07	0.23	0.47	0.91	0.91	0.80	0.50	0.17	0.09	0.01	0.00	0.00
4	0.01	0.00	0.10	0.22	0.42	1.00	0.83	0.74	0.51	0.23	0.09	0.00	0.00	0.00
5	0.01	0.01	0.07	0.15	0.52	0.76	0.91	0.84	0.47	0.24	0.17	0.01	0.01	0.00
6	0.00	0.02	0.06	0.12	0.40	0.73	0.91	0.84	0.52	0.38	0.16	0.01	0.01	0.00
7	0.00	0.03	0.02	0.11	0.40	0.76	0.90	0.87	0.58	0.36	0.11	0.03	0.01	0.00
8	0.01	0.01	0.03	0.17	0.38	0.62	0.97	0.73	0.63	0.39	0.20	0.04	0.01	0.00
9	0.00	0.00	0.05	0.12	0.41	0.70	0.83	0.90	0.57	0.41	0.13	0.04	0.01	0.00
10	0.00	0.01	0.05	0.17	0.39	0.73	1.14	0.81	0.56	0.22	0.09	0.01	0.00	0.00
11	0.01	0.01	0.12	0.33	0.53	1.05	1.01	0.65	0.34	0.09	0.03	0.00	0.01	0.00
12	0.00	0.04	0.13	0.46	0.65	1.10	0.92	0.56	0.23	0.05	0.00	0.01	0.01	0.00
13	0.02	0.03	0.08	0.31	0.65	0.99	1.12	0.62	0.27	0.04	0.01	0.01	0.02	0.00
14	0.03	0.01	0.08	0.28	0.56	1.02	1.08	0.65	0.27	0.12	0.02	0.04	0.00	0.00
15	0.01	0.02	0.07	0.17	0.43	0.95	1.02	0.84	0.42	0.15	0.08	0.00	0.00	0.00
16	0.00	0.02	0.06	0.20	0.41	0.91	0.99	0.78	0.42	0.26	0.09	0.02	0.00	0.00
17	0.00	0.00	0.05	0.18	0.41	0.82	1.06	0.76	0.59	0.23	0.05	0.00	0.00	0.00
18	0.00	0.00	0.04	0.13	0.47	0.72	0.95	0.93	0.56	0.30	0.08	0.00	0.00	0.00
19	0.00	0.01	0.06	0.16	0.42	0.74	0.94	0.97	0.54	0.21	0.11	0.00	0.01	0.00
20	0.00	0.00	0.08	0.23	0.45	0.73	1.01	0.94	0.39	0.27	0.03	0.03	0.02	0.00
21	0.00	0.02	0.05	0.22	0.38	0.79	1.07	0.86	0.51	0.22	0.04	0.00	0.01	0.00
22	0.00	0.00	0.03	0.20	0.47	0.82	1.06	0.70	0.58	0.23	0.06	0.01	0.01	0.00
23	0.01	0.02	0.04	0.24	0.40	0.69	1.10	0.74	0.65	0.18	0.05	0.04	0.00	0.00
24	0.00	0.00	0.09	0.29	0.46	0.91	0.98	0.69	0.55	0.16	0.04	0.00	0.00	0.02
TOTAL	0.11	0.30	1.56	5.16	10.97	20.17	23.64	18.65	11.69	5.35	1.92	0.33	0.14	0.02

NUMBER OF OBSERVATIONS 5208

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)												TOTAL	
	≤0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥0.12	MISSING
1	0.00	0.00	0.04	0.13	0.23	0.50	0.75	1.00	0.83	0.40	0.21	0.06	0.02	0.00
2	0.00	0.00	0.04	0.08	0.25	0.56	0.67	0.84	1.00	0.36	0.23	0.04	0.10	0.00
3	0.00	0.02	0.02	0.06	0.31	0.46	0.67	1.00	0.83	0.38	0.25	0.13	0.04	0.00
4	0.00	0.00	0.08	0.06	0.17	0.54	0.71	0.98	0.79	0.40	0.33	0.10	0.02	0.00
5	0.00	0.00	0.02	0.10	0.25	0.44	0.86	0.94	0.61	0.44	0.40	0.04	0.06	0.00
6	0.00	0.02	0.08	0.06	0.29	0.42	0.71	0.86	0.79	0.46	0.27	0.15	0.06	0.00
7	0.00	0.00	0.00	0.10	0.25	0.50	0.67	0.88	0.86	0.48	0.21	0.15	0.06	0.00
8	0.00	0.00	0.02	0.08	0.13	0.52	0.65	0.90	0.98	0.46	0.25	0.12	0.06	0.00
9	0.00	0.00	0.02	0.04	0.25	0.40	0.81	0.96	0.84	0.48	0.21	0.10	0.06	0.00
10	0.00	0.02	0.00	0.04	0.21	0.40	0.77	0.84	0.98	0.44	0.29	0.10	0.08	0.00
11	0.00	0.02	0.02	0.08	0.29	0.49	0.69	1.02	0.73	0.65	0.27	0.06	0.06	0.00
12	0.00	0.00	0.08	0.08	0.27	0.48	0.92	1.04	0.73	0.44	0.13	0.06	0.02	0.00
13	0.00	0.00	0.04	0.06	0.27	0.46	0.94	0.98	0.69	0.48	0.10	0.08	0.08	0.00
14	0.00	0.00	0.04	0.04	0.31	0.52	0.88	1.19	0.69	0.36	0.10	0.04	0.00	0.00
15	0.00	0.00	0.02	0.08	0.35	0.35	0.84	1.23	0.73	0.29	0.23	0.02	0.04	0.00
16	0.00	0.00	0.00	0.10	0.17	0.50	0.69	1.13	0.90	0.35	0.19	0.10	0.02	0.02
17	0.00	0.00	0.00	0.04	0.25	0.42	0.54	1.27	0.96	0.40	0.19	0.08	0.02	0.00
18	0.00	0.00	0.00	0.08	0.17	0.35	0.69	1.17	1.00	0.29	0.25	0.15	0.02	0.00
19	0.00	0.00	0.02	0.08	0.21	0.36	0.71	1.11	0.83	0.46	0.29	0.10	0.00	0.00
20	0.00	0.02	0.02	0.12	0.21	0.44	0.58	1.09	0.88	0.48	0.21	0.12	0.00	0.00
21	0.00	0.00	0.00	0.17	0.25	0.33	0.56	1.11	1.11	0.35	0.23	0.06	0.00	0.00
22	0.00	0.00	0.00	0.12	0.23	0.42	0.58	0.96	1.15	0.42	0.23	0.06	0.00	0.00
23	0.00	0.00	0.02	0.12	0.31	0.36	0.48	0.98	1.00	0.58	0.23	0.06	0.02	0.00
24	0.00	0.02	0.06	0.15	0.21	0.35	0.69	0.90	0.94	0.52	0.27	0.04	0.00	0.02
TOTAL	0.00	0.12	0.54	2.02	5.84	10.37	17.07	24.40	20.85	10.39	5.57	1.98	0.81	0.06

Table 570. Percentage Frequency Distribution of the Difference in Station Pressure in Inches of Mercury at the Chicago Stations and Argonne Meteorology Site for Each Hour of the Day. January 1950–December 1964 (Midway) and November 1958–December 1964 (O'Hare)

HOUR	MIDWAY MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤0.08	0.09	0.10	0.11	0.12	0.13	C.14	0.15	0.16	0.17	0.18	0.19	≥0.20	MISSING	
1	0.02	0.04	0.15	0.43	0.78	0.96	0.84	0.53	0.26	0.11	0.04	0.01	0.01	0.02	4.17
2	0.02	0.04	0.15	0.41	0.73	0.97	0.86	0.52	0.27	0.12	0.04	0.01	0.01	0.02	4.17
3	0.02	0.04	0.15	0.38	0.74	0.95	0.86	0.57	0.29	0.11	0.03	0.01	0.01	0.02	4.17
4	0.02	0.04	0.13	0.35	0.67	0.93	0.91	0.59	0.31	0.14	0.04	0.02	0.01	0.02	4.17
5	0.02	0.03	0.11	0.30	0.60	0.87	0.95	0.65	0.36	0.14	0.08	0.01	0.01	0.02	4.17
6	0.02	0.02	0.09	0.25	0.56	0.90	0.95	0.68	0.39	0.16	0.07	0.02	0.01	0.02	4.17
7	0.02	0.03	0.09	0.26	0.56	0.90	0.94	0.68	0.40	0.17	0.07	0.02	0.00	0.02	4.17
8	0.02	0.02	0.11	0.29	0.60	0.90	0.90	0.66	0.37	0.18	0.07	0.02	0.01	0.02	4.17
9	0.01	0.03	0.12	0.34	0.67	0.87	0.90	0.64	0.33	0.16	0.04	0.02	0.01	0.01	4.17
10	0.02	0.04	0.16	0.37	0.70	0.92	0.87	0.60	0.30	0.12	0.04	0.01	0.01	0.01	4.17
11	0.02	0.05	0.19	0.49	0.80	0.95	0.80	0.52	0.22	C.08	0.02	0.00	0.01	0.01	4.17
12	0.03	0.06	0.23	0.56	0.87	0.97	0.78	0.43	0.16	0.05	0.01	0.00	0.01	0.01	4.17
13	0.03	0.07	0.25	0.53	0.90	0.93	0.77	0.43	0.16	0.05	0.02	0.01	0.01	0.01	4.17
14	0.04	0.07	0.26	0.55	0.82	0.96	0.75	0.42	0.19	0.06	0.02	0.01	0.00	0.01	4.17
15	0.03	0.07	0.20	0.52	0.81	0.93	0.80	0.44	0.24	0.07	0.03	0.01	0.01	0.01	4.17
16	0.03	0.07	0.20	0.50	0.78	0.90	0.81	0.49	0.24	0.09	0.04	0.01	0.00	0.01	4.17
17	0.03	0.07	0.20	0.49	0.74	0.89	0.80	0.52	0.26	0.11	0.04	0.01	0.00	0.02	4.17
18	0.02	0.05	0.14	0.43	0.76	0.88	0.84	0.57	0.28	0.12	0.04	0.00	0.01	0.02	4.17
19	0.02	0.05	0.15	0.40	0.71	0.94	0.88	0.57	0.30	0.10	0.03	0.00	0.01	0.01	4.17
20	0.02	0.05	0.12	0.35	0.70	0.93	0.93	0.61	0.27	0.12	0.03	0.01	0.01	0.01	4.17
21	0.02	0.03	0.13	0.31	0.70	0.95	0.95	0.62	0.28	0.11	0.04	0.01	0.01	0.01	4.17
22	0.02	0.04	0.12	0.36	0.70	0.98	0.95	0.54	0.28	0.11	0.03	0.01	0.01	0.01	4.17
23	0.02	0.04	0.11	0.40	0.70	0.98	0.91	0.56	0.29	0.10	0.03	0.01	0.00	0.02	4.17
24	0.02	0.03	0.14	0.42	0.75	0.98	0.84	0.55	0.30	0.09	0.03	0.01	0.01	0.02	4.17
TOTAL	0.52	1.09	3.69	9.72	17.35	22.33	20.77	13.39	6.76	2.66	0.91	0.25	0.16	0.38	

HOUR	O'HARE MINUS ARGONNE AIR PRESSURE DIFFERENCE (INCHES OF MERCURY)													TOTAL	
	≤0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	≥0.12	MISSING	
1	0.01	0.01	0.02	0.08	0.26	0.46	0.78	0.92	0.85	0.50	0.18	0.05	0.03	0.01	4.17
2	0.00	0.01	0.04	0.08	0.23	0.50	0.74	0.92	0.85	0.49	0.21	0.05	0.04	0.01	4.17
3	0.00	0.01	0.03	0.07	0.26	0.46	0.72	0.97	0.86	0.48	0.19	0.06	0.04	0.01	4.17
4	0.01	0.01	0.04	0.10	0.21	0.48	0.76	0.88	0.86	0.50	0.21	0.08	0.02	0.01	4.17
5	0.00	0.01	0.03	0.11	0.21	0.43	0.72	0.92	0.86	0.51	0.25	0.06	0.05	0.01	4.17
6	0.00	0.01	0.04	0.08	0.22	0.36	0.72	0.83	0.88	0.62	0.26	0.11	0.04	0.01	4.17
7	0.00	0.01	0.01	0.08	0.21	0.42	0.70	0.87	0.87	0.60	0.26	0.08	0.04	0.01	4.17
8	0.00	0.01	0.04	0.08	0.16	0.39	0.70	0.92	0.90	0.63	0.20	0.08	0.05	0.01	4.17
9	0.00	0.01	0.03	0.09	0.21	0.41	0.71	0.88	0.93	0.56	0.22	0.08	0.04	0.01	4.17
10	0.00	0.01	0.03	0.06	0.21	0.44	0.70	0.86	0.97	0.50	0.24	0.09	0.04	0.01	4.17
11	0.00	0.01	0.04	0.09	0.18	0.44	0.71	0.93	0.86	0.54	0.25	0.07	0.05	0.01	4.17
12	0.01	0.01	0.03	0.09	0.24	0.50	0.80	0.90	0.80	0.46	0.22	0.06	0.04	0.01	4.17
13	0.00	0.03	0.03	0.10	0.27	0.43	0.80	0.94	0.77	0.46	0.20	0.08	0.05	0.01	4.17
14	0.00	0.02	0.05	0.11	0.26	0.50	0.86	0.93	0.71	0.45	0.19	0.05	0.03	0.01	4.17
15	0.01	0.01	0.03	0.09	0.28	0.51	0.84	0.96	0.72	0.44	0.17	0.06	0.04	0.01	4.17
16	0.01	0.01	0.03	0.10	0.27	0.48	0.81	0.93	0.80	0.43	0.19	0.07	0.02	0.01	4.17
17	0.00	0.02	0.04	0.08	0.27	0.51	0.78	0.94	0.80	0.43	0.18	0.07	0.03	0.01	4.17
18	0.01	0.00	0.02	0.09	0.24	0.49	0.75	0.96	0.83	0.45	0.20	0.08	0.04	0.01	4.17
19	0.01	0.01	0.05	0.08	0.23	0.47	0.79	0.98	0.83	0.42	0.21	0.06	0.03	0.01	4.17
20	0.00	0.02	0.02	0.10	0.20	0.48	0.70	1.01	0.85	0.47	0.20	0.08	0.03	0.01	4.17
21	0.01	0.01	0.02	0.09	0.19	0.44	0.66	1.04	0.90	0.50	0.21	0.06	0.04	0.01	4.17
22	0.01	0.01	0.02	0.09	0.20	0.37	0.75	0.94	0.93	0.56	0.19	0.05	0.04	0.01	4.17
23	0.00	0.01	0.03	0.08	0.22	0.40	0.73	0.98	0.91	0.50	0.21	0.04	0.03	0.01	4.17
24	0.01	0.01	0.03	0.08	0.19	0.47	0.70	0.96	0.90	0.48	0.24	0.05	0.03	0.01	4.17
TOTAL	0.11	0.28	0.77	2.10	5.41	10.84	17.93	22.36	20.46	11.97	5.08	1.61	0.87	0.22	

Table 571. Monthly Average Station Pressure in Inches of Mercury at Chicago Midway Airport and Argonne Meteorology Site.
January 1950-December 1964

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	MIDWAY	29.43	29.43	29.30	29.32	29.29	29.27	29.33	29.36	29.40	29.36	29.32	29.35
	ARGONNE	29.29	29.29	29.17	29.19	29.17	29.12	29.20	29.25	29.27	29.21	29.18	29.21
	DIFFERENCE	0.14	0.14	0.13	0.13	0.12	0.15	0.13	0.11	0.13	0.15	0.14	0.14
1951	MIDWAY	29.37	29.47	29.28	29.19	29.27	29.26	29.33	29.34	29.35	29.40	29.40	29.32
	ARGONNE	29.22	29.33	29.14	29.06	29.14	29.13	29.21	29.21	29.21	29.26	29.25	29.18
	DIFFERENCE	0.15	0.14	0.14	0.13	0.13	0.13	0.12	0.13	0.14	0.14	0.15	0.14
1952	MIDWAY	29.40	29.31	29.29	29.34	29.27	29.27	29.38	29.33	29.41	29.45	29.35	29.34
	ARGONNE	29.25	29.17	29.14	29.21	29.14	29.15	29.25	29.21	29.28	29.31	29.21	29.20
	DIFFERENCE	0.15	0.14	0.15	0.13	0.13	0.12	0.13	0.12	0.13	0.14	0.14	0.14
1953	MIDWAY	29.29	29.32	29.33	29.14	29.25	29.31	29.37	29.40	29.32	29.44	29.42	29.30
	ARGONNE	29.14	29.17	29.19	29.01	29.12	29.19	29.25	29.26	29.19	29.30	29.27	29.15
	DIFFERENCE	0.15	0.15	0.14	0.13	0.13	0.12	0.12	0.14	0.13	0.14	0.15	0.15
1954	MIDWAY	29.46	29.23	29.30	29.37	29.29	29.25	29.32	29.35	29.31	29.38	29.35	29.35
	ARGONNE	29.31	29.10	29.16	29.25	29.17	29.13	29.19	29.22	29.18	29.24	29.21	29.20
	DIFFERENCE	0.15	0.13	0.14	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.15
1955	MIDWAY	29.36	29.48	29.28	29.24	29.30	29.28	29.34	29.34	29.40	29.26	29.29	29.49
	ARGONNE	29.22	29.32	29.15	29.11	29.18	29.16	29.22	29.21	29.26	29.12	29.16	29.34
	DIFFERENCE	0.14	0.16	0.13	0.13	0.12	0.12	0.12	0.13	0.14	0.14	0.13	0.15
1956	MIDWAY	29.48	29.35	29.32	29.22	29.35	29.33	29.29	29.30	29.37	29.46	29.33	29.33
	ARGONNE	29.33	29.20	29.18	29.08	29.21	29.21	29.17	29.18	29.25	29.32	29.18	29.19
	DIFFERENCE	0.15	0.15	0.14	0.14	0.14	0.12	0.12	0.12	0.12	0.14	0.15	0.14
1957	MIDWAY	29.52	29.46	29.31	29.39	29.33	29.24	29.32	29.41	29.38	29.50	29.31	29.31
	ARGONNE	29.36	29.32	29.17	29.26	29.20	29.12	29.21	29.29	29.25	29.37	29.18	29.17
	DIFFERENCE	0.16	0.14	0.14	0.13	0.13	0.12	0.11	0.12	0.13	0.13	0.13	0.14
1958	MIDWAY	29.36	29.33	29.41	29.29	29.34	29.27	29.29	29.27	29.35	29.39	29.32	29.50
	ARGONNE	29.22	29.18	29.26	29.16	29.22	29.15	29.17	29.16	29.24	29.27	29.19	29.36
	DIFFERENCE	0.14	0.15	0.15	0.13	0.12	0.12	0.12	0.11	0.11	0.12	0.13	0.14
1959	MIDWAY	29.42	29.42	29.29	29.31	29.35	29.32	29.39	29.31	29.40	29.29	29.37	29.38
	ARGONNE	29.29	29.28	29.16	29.18	29.22	29.20	29.26	29.20	29.28	29.17	29.25	29.26
	DIFFERENCE	0.13	0.14	0.13	0.13	0.13	0.12	0.13	0.11	0.12	0.12	0.12	0.12
1960	MIDWAY	29.39	29.32	29.44	29.25	29.18	29.29	29.35	29.34	29.39	29.33	29.35	29.50
	ARGONNE	29.27	29.20	29.31	29.13	29.06	29.16	29.22	29.21	29.27	29.20	29.23	29.37
	DIFFERENCE	0.12	0.12	0.13	0.12	0.12	0.13	0.13	0.13	0.12	0.13	0.12	0.13
1961	MIDWAY	29.46	29.40	29.27	29.19	29.40	29.31	29.32	29.42	29.38	29.39	29.41	29.36
	ARGONNE	29.32	29.27	29.12	29.05	29.26	29.18	29.20	29.28	29.24	29.26	29.29	29.22
	DIFFERENCE	0.14	0.13	0.15	0.14	0.14	0.13	0.12	0.14	0.14	0.13	0.12	0.14
1962	MIDWAY	29.42	29.37	29.34	29.36	29.32	29.35	29.33	29.33	29.39	29.32	29.46	29.43
	ARGONNE	29.29	29.23	29.21	29.23	29.19	29.23	29.20	29.20	29.26	29.19	29.32	29.28
	DIFFERENCE	0.13	0.14	0.13	0.13	0.13	0.12	0.13	0.13	0.13	0.13	0.14	0.15
1963	MIDWAY	29.45	29.40	29.30	29.30	29.39	29.31	29.33	29.36	29.44	29.45	29.33	29.45
	ARGONNE	29.30	29.25	29.15	29.17	29.25	29.18	29.20	29.23	29.31	29.32	29.20	29.31
	DIFFERENCE	0.15	0.15	0.15	0.13	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.14
1964	MIDWAY	29.27	29.28	29.29	29.27	29.33	29.31	29.33	29.30	29.40	29.44	29.40	29.40
	ARGONNE	29.14	29.14	29.15	29.13	29.19	29.17	29.20	29.17	29.26	29.30	29.26	29.26
	DIFFERENCE	0.13	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.14	0.14	0.14	0.14

Table 572. Monthly Average Station Pressure in Inches of Mercury at
O'Hare International Airport and Argonne Meteorology Site.
November 1958–December 1964

YEAR		MONTH											
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1950	O'HARE	29.40	29.40	29.26	29.29	29.27	29.25	29.31	29.35	29.38	29.33	29.29	29.32
	ARGONNE	29.29	29.29	29.17	29.19	29.17	29.12	29.20	29.25	29.27	29.21	29.18	29.21
	DIFFERENCE	0.11	0.11	0.09	0.10	0.10	0.13	0.11	0.10	0.11	0.12	0.11	0.11
1951	O'HARE	29.34	29.44	29.25	29.17	29.25	29.24	29.31	29.32	29.32	29.37	29.37	29.29
	ARGONNE	29.22	29.33	29.14	29.06	29.14	29.13	29.21	29.21	29.21	29.26	29.25	29.18
	DIFFERENCE	0.12	0.11	0.11	0.11	0.11	0.11	0.10	0.11	0.11	0.11	0.12	0.11
1952	O'HARE	29.36	29.28	29.26	29.32	29.24	29.24	29.36	29.31	29.38	29.40	29.30	29.28
	ARGONNE	29.25	29.17	29.14	29.21	29.14	29.15	29.25	29.21	29.28	29.31	29.21	29.20
	DIFFERENCE	0.11	0.11	0.12	0.11	0.10	0.09	0.11	0.10	0.10	0.10	0.09	0.08
1953	O'HARE	29.23	29.26	29.28	29.09	29.21	29.28	29.33	29.36	29.28	29.40	29.37	29.24
	ARGONNE	29.13	29.17	29.19	29.01	29.12	29.19	29.25	29.26	29.19	29.30	29.27	29.15
	DIFFERENCE	0.10	0.09	0.09	0.08	0.09	0.09	0.08	0.10	0.09	0.10	0.10	0.09
1954	O'HARE	29.39	29.19	29.25	29.33	29.25	29.23	29.29	29.33	29.29	29.35	29.32	29.32
	ARGONNE	29.31	29.10	29.16	29.25	29.17	29.13	29.19	29.22	29.18	29.24	29.21	29.20
	DIFFERENCE	0.08	0.09	0.09	0.08	0.08	0.10	0.10	0.11	0.11	0.11	0.11	0.12
1955	O'HARE	29.33	29.45	29.25	29.21	29.28	29.27	29.33	29.32	29.36	29.20	29.24	29.43
	ARGONNE	29.22	29.32	29.15	29.11	29.18	29.16	29.22	29.21	29.26	29.12	29.16	29.34
	DIFFERENCE	0.11	0.13	0.10	0.10	0.10	0.11	0.11	0.11	0.10	0.08	0.08	0.09
1956	O'HARE	29.42	29.30	29.27	29.17	29.29	29.28	29.25	29.25	29.33	29.41	29.27	29.27
	ARGONNE	29.33	29.20	29.18	29.08	29.21	29.21	29.17	29.18	29.25	29.32	29.18	29.19
	DIFFERENCE	0.09	0.10	0.09	0.09	0.08	0.07	0.08	0.07	0.08	0.09	0.09	0.08
1957	O'HARE	29.46	29.40	29.25	29.34	29.28	29.19	29.28	29.36	29.33	29.45	29.26	29.25
	ARGONNE	29.36	29.32	29.17	29.26	29.20	29.12	29.21	29.29	29.25	29.37	29.18	29.17
	DIFFERENCE	0.10	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08
1958	O'HARE	29.30	29.27	29.36	29.24	29.29	29.22	29.24	29.22	29.31	29.35	29.25	29.44
	ARGONNE	29.22	29.18	29.26	29.16	29.22	29.15	29.17	29.16	29.24	29.27	29.19	29.36
	DIFFERENCE	0.08	0.09	0.10	0.08	0.07	0.07	0.07	0.06	0.07	0.08	0.06	0.08
1959	O'HARE	29.36	29.35	29.23	29.24	29.29	29.27	29.33	29.26	29.35	29.23	29.32	29.33
	ARGONNE	29.29	29.28	29.16	29.18	29.22	29.20	29.26	29.20	29.28	29.17	29.25	29.26
	DIFFERENCE	0.07	0.07	0.07	0.06	0.07	0.07	0.07	0.06	0.07	0.06	0.07	0.07
1960	O'HARE	29.33	29.27	29.38	29.20	29.13	29.23	29.29	29.29	29.34	29.27	29.29	29.43
	ARGONNE	29.27	29.20	29.31	29.13	29.06	29.16	29.22	29.21	29.27	29.20	29.23	29.37
	DIFFERENCE	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.06	0.06
1961	O'HARE	29.39	29.34	29.20	29.13	29.33	29.25	29.26	29.35	29.31	29.33	29.35	29.30
	ARGONNE	29.32	29.27	29.12	29.05	29.26	29.18	29.20	29.28	29.24	29.26	29.29	29.22
	DIFFERENCE	0.07	0.07	0.08	0.08	0.07	0.07	0.06	0.07	0.07	0.07	0.06	0.08
1962	O'HARE	29.36	29.31	29.29	29.29	29.26	29.30	29.27	29.27	29.33	29.25	29.39	29.36
	ARGONNE	29.29	29.23	29.21	29.23	29.19	29.23	29.20	29.20	29.26	29.19	29.32	29.28
	DIFFERENCE	0.07	0.08	0.08	0.06	0.07	0.07	0.07	0.07	0.07	0.06	0.07	0.08
1963	O'HARE	29.37	29.32	29.22	29.24	29.33	29.25	29.27	29.30	29.38	29.39	29.27	29.38
	ARGONNE	29.30	29.25	29.15	29.17	29.25	29.18	29.20	29.23	29.31	29.32	29.20	29.31
	DIFFERENCE	0.07	0.07	0.07	0.07	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07
1964	O'HARE	29.20	29.21	29.23	29.21	29.27	29.25	29.28	29.24	29.34	29.38	29.33	29.33
	ARGONNE	29.14	29.14	29.15	29.13	29.19	29.17	29.20	29.17	29.26	29.30	29.26	29.26
	DIFFERENCE	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.08	0.07	0.07

Section 3.5

Precipitation Amount Comparisons

Tables 573 and 574. Monthly Precipitation Amounts in Inches at the Chicago Stations and Argonne Meteorology Site. January 1950-December 1964.

In these tables the monthly amounts of precipitation for Chicago Midway Airport, O'Hare Airport and Argonne Meteorology Site are presented. As is evident, there was considerable variation in the precipitation from month to month at all three locations. The precipitation ratio for each month, i.e., Chicago precipitation amounts divided by Argonne amounts, are also presented. During most of the months, each station received approximately within 50% of the amount received at Argonne; however, there were exceptions. The exceptions occurred during months with subnormal precipitation amounts in both locations.

The total column indicates that the annual amounts measured at the Chicago Stations are in general within 20% of amounts measured at Argonne.

Table 573. Monthly Precipitation Totals (Inches) at Chicago
Midway Airport and Argonne Meteorology Laboratory

YEAR		MONTH												TOTALS
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	CHICAGO PRECIPITATION	3.77	3.35	2.01	4.67	.78	8.89	6.78	1.78	2.00	1.29	1.63	2.70	39.65
	ARGONNE PRECIPITATION	3.52	1.43	.60	4.82	.13	5.86	5.72	1.91	1.89	1.20	1.53	1.20	29.81
	PRECIPITATION RATIO	1.07	2.34	3.35	.97	6.00	1.52	1.19	.93	1.06	1.08	1.07	2.25	1.33
1951	CHICAGO PRECIPITATION	1.81	2.62	2.81	4.62	4.90	2.05	4.96	4.86	5.29	2.73	3.74	2.76	43.15
	ARGONNE PRECIPITATION	1.46	2.08	2.39	3.66	5.23	2.66	5.30	4.22	5.19	2.89	3.53	1.40	40.01
	PRECIPITATION RATIO	1.24	1.26	1.18	1.26	.94	.77	.94	1.15	1.02	.94	1.06	1.97	1.08
1952	CHICAGO PRECIPITATION	2.18	.44	3.64	2.54	3.18	3.63	2.27	3.69	1.61	.90	2.25	1.96	28.29
	ARGONNE PRECIPITATION	1.47	.10	3.45	2.53	2.74	4.98	3.47	5.18	1.76	.62	2.62	2.03	30.95
	PRECIPITATION RATIO	1.48	4.40	1.06	1.00	1.16	.73	.65	.71	.91	1.45	.86	.97	.91
1953	CHICAGO PRECIPITATION	1.47	1.58	3.92	2.82	2.43	4.63	4.16	1.00	2.02	1.25	1.77	3.10	30.15
	ARGONNE PRECIPITATION	1.36	1.23	3.47	2.98	2.97	7.39	5.91	2.95	2.23	.94	1.03	2.51	34.97
	PRECIPITATION RATIO	1.08	1.28	1.13	.95	.82	.63	.70	.34	.91	1.33	1.72	1.24	.86
1954	CHICAGO PRECIPITATION	1.10	2.40	5.00	4.43	1.75	4.27	4.58	5.91	.83	12.06	1.80	.60	44.73
	ARGONNE PRECIPITATION	.98	2.38	4.02	4.10	2.48	2.44	5.32	5.51	1.00	13.03	1.26	1.30	43.82
	PRECIPITATION RATIO	1.12	1.01	1.24	1.08	.71	1.75	.86	1.07	.83	.93	1.43	.46	1.02
1955	CHICAGO PRECIPITATION	1.49	1.83	1.72	2.01	3.86	3.04	2.84	5.35	1.47	3.37	1.46	.52	28.96
	ARGONNE PRECIPITATION	1.19	1.66	1.63	2.66	5.55	3.55	2.21	6.26	1.40	4.36	1.22	.43	32.12
	PRECIPITATION RATIO	1.25	1.10	1.06	.76	.70	.86	1.29	.85	1.05	.77	1.20	1.21	.90
1956	CHICAGO PRECIPITATION	.38	2.26	1.10	4.53	3.06	.78	2.49	4.18	.46	.25	1.31	1.26	22.06
	ARGONNE PRECIPITATION	.25	1.76	.44	3.44	3.71	1.03	2.54	3.21	.86	.49	1.25	1.05	20.03
	PRECIPITATION RATIO	1.52	1.28	2.50	1.32	.83	.76	.98	1.30	.54	.51	1.05	1.20	1.10
1957	CHICAGO PRECIPITATION	2.06	1.77	1.98	6.09	3.21	5.94	8.98	5.36	1.08	3.15	2.72	1.95	44.29
	ARGONNE PRECIPITATION	1.73	1.88	1.78	4.99	3.04	4.15	5.80	5.80	1.07	2.39	2.63	1.79	37.05
	PRECIPITATION RATIO	1.19	.94	1.11	1.22	1.06	1.43	1.55	.92	1.01	1.32	1.03	1.09	1.19
1958	CHICAGO PRECIPITATION	1.12	.33	.33	1.64	3.12	6.43	4.74	2.51	1.86	2.12	1.58	.57	26.35
	ARGONNE PRECIPITATION	.74	.34	.23	1.82	3.36	6.47	5.93	2.96	1.93	2.14	1.09	.50	27.51
	PRECIPITATION RATIO	1.51	.97	1.44	.90	.93	.99	.80	.85	.96	.99	1.45	1.14	.96
1959	CHICAGO PRECIPITATION	2.13	2.39	3.91	2.00	3.87	5.94	4.77	1.63	2.17	2.86	3.01	2.00	36.68
	ARGONNE PRECIPITATION	.87	2.24	3.85	4.66	4.14	2.51	5.45	2.04	2.58	3.69	2.76	2.02	36.81
	PRECIPITATION RATIO	2.45	1.07	1.02	.43	.94	2.37	.88	.80	.84	.78	1.09	.99	1.00
1960	CHICAGO PRECIPITATION	3.73	3.16	1.15	3.14	2.83	3.77	1.58	1.02	1.40	1.71	1.28	1.07	25.84
	ARGONNE PRECIPITATION	3.31	1.81	.65	4.05	2.39	2.70	1.29	1.91	1.60	1.65	1.12	.36	22.84
	PRECIPITATION RATIO	1.13	1.75	1.77	.78	1.18	1.40	1.22	.53	.88	1.04	1.14	2.97	1.13
1961	CHICAGO PRECIPITATION	.26	.90	2.96	3.28	1.53	3.70	2.99	6.07	14.17	3.49	1.66	1.89	42.90
	ARGONNE PRECIPITATION	.03	1.09	3.27	2.08	2.01	2.44	3.25	4.25	13.17	2.80	1.77	2.02	38.18
	PRECIPITATION RATIO	8.67	.83	.91	1.58	.76	1.52	.92	1.43	1.08	1.25	.94	.94	1.12
1962	CHICAGO PRECIPITATION	2.53	1.81	1.82	1.56	2.90	2.56	4.65	.85	.77	1.38	1.09	.30	22.22
	ARGONNE PRECIPITATION	2.39	1.12	1.55	2.66	3.51	3.69	4.16	2.07	1.72	1.35	.86	.35	25.43
	PRECIPITATION RATIO	1.06	1.62	1.17	.59	.83	.69	1.12	.41	.45	1.02	1.27	.86	.87
1963	CHICAGO PRECIPITATION	1.01	.54	2.44	4.79	2.17	2.39	7.31	2.15	2.63	.62	1.21	.76	28.02
	ARGONNE PRECIPITATION	1.25	.91	2.58	3.31	2.40	2.44	7.05	1.24	2.17	1.00	1.42	.75	26.52
	PRECIPITATION RATIO	.81	.59	.95	1.45	.90	.98	1.04	1.73	1.21	.62	.85	1.01	1.06
1964	CHICAGO PRECIPITATION	1.08	.57	3.81	4.96	1.74	1.94	4.83	2.19	2.50	.20	1.26	1.87	26.95
	ARGONNE PRECIPITATION	.71	.63	3.26	5.37	2.31	2.89	3.64	2.67	3.52	.24	1.72	1.05	28.01
	PRECIPITATION RATIO	1.52	.91	1.17	.92	.75	.67	1.33	.82	.71	.83	.73	1.73	.96

Table 574. Monthly Precipitation Totals (Inches) at Chicago O'Hare International Airport and Argonne Meteorology Laboratory

YEAR		MONTH												TOTALS
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1950	CHICAGO PRECIPITATION	4.26	2.52	2.16	1.42	.43	5.98	3.31	2.51	1.18	2.45	1.42	2.63	30.27
	ARGONNE PRECIPITATION	3.52	1.43	.60	4.82	.13	5.86	5.72	1.91	1.89	1.20	1.53	1.20	29.81
	PRECIPITATION RATIO	1.21	1.76	3.60	.30	3.31	1.02	.58	1.35	.62	2.04	.94	2.19	1.01
1951	CHICAGO PRECIPITATION	1.78	2.04	3.67	2.56	3.26	3.83	6.64	3.73	3.19	2.79	2.86	4.42	40.77
	ARGONNE PRECIPITATION	1.46	2.08	2.39	3.66	5.23	2.66	5.30	4.22	5.19	2.89	3.53	1.40	40.01
	PRECIPITATION RATIO	1.22	.98	1.54	.70	.62	1.44	1.25	.88	.62	.97	.81	3.16	1.02
1952	CHICAGO PRECIPITATION	1.76	.36	3.87	2.98	3.13	4.91	3.99	3.23	1.23	.31	2.49	1.94	30.20
	ARGONNE PRECIPITATION	1.47	.10	3.54	2.53	2.74	4.98	3.47	5.18	1.76	.62	2.62	2.03	31.04
	PRECIPITATION RATIO	1.20	3.60	1.09	1.18	1.14	.99	1.15	.62	.70	.50	.95	.96	.97
1953	CHICAGO PRECIPITATION	1.20	1.00	3.14	2.10	2.10	3.28	2.80	1.46	2.82	.87	1.23	2.32	24.32
	ARGONNE PRECIPITATION	1.36	1.23	3.47	2.98	2.98	7.39	5.91	2.95	2.23	.94	1.03	2.51	34.98
	PRECIPITATION RATIO	.88	.81	.91	.70	.71	.44	.47	.49	1.26	.93	1.19	.92	.69
1954	CHICAGO PRECIPITATION	1.45	1.34	4.37	5.33	2.79	3.98	4.05	5.05	1.62	9.55	.96	2.60	43.09
	ARGONNE PRECIPITATION	.98	2.38	4.02	4.10	2.48	2.44	5.32	5.51	1.00	13.03	1.26	1.30	43.82
	PRECIPITATION RATIO	1.48	.56	1.09	1.30	1.16	1.63	.76	.92	1.62	.73	.76	2.00	.98
1955	CHICAGO PRECIPITATION	2.25	2.23	2.10	2.38	3.56	4.71	1.25	2.47	2.05	6.07	1.94	.94	31.95
	ARGONNE PRECIPITATION	1.19	1.66	1.63	2.66	5.55	3.55	2.21	6.26	1.40	4.36	1.22	.43	32.12
	PRECIPITATION RATIO	1.89	1.34	1.29	.90	.64	1.33	.57	.40	1.46	1.39	1.59	2.19	.99
1956	CHICAGO PRECIPITATION	.42	1.42	1.10	4.34	4.06	1.40	2.16	4.76	.55	.26	1.69	1.00	23.16
	ARGONNE PRECIPITATION	.25	1.76	.44	3.44	3.71	1.03	2.54	3.21	.86	.49	1.25	1.05	20.03
	PRECIPITATION RATIO	1.68	.81	2.50	1.26	1.09	1.36	.85	1.48	.64	.53	1.35	.95	1.16
1957	CHICAGO PRECIPITATION	3.04	2.44	2.65	3.65	3.49	5.85	9.04	4.21	1.47	2.89	3.01	3.53	45.27
	ARGONNE PRECIPITATION	1.73	1.88	1.78	4.99	3.04	4.15	5.80	5.08	1.07	2.39	2.63	1.79	36.33
	PRECIPITATION RATIO	1.76	1.30	1.49	.73	1.15	1.41	1.56	.83	1.37	1.21	1.14	1.97	1.25
1958	CHICAGO PRECIPITATION	1.57	.34	.63	2.84	2.76	4.37	4.37	1.97	2.04	1.99	1.85	.72	25.45
	ARGONNE PRECIPITATION	.74	.34	.23	1.82	3.36	6.47	5.93	2.96	1.93	2.14	1.09	.50	27.51
	PRECIPITATION RATIO	2.12	1.00	2.74	1.56	.82	.68	.74	.67	1.06	.93	1.70	1.44	.92
1959	CHICAGO PRECIPITATION	1.91	1.56	3.39	2.44	3.44	1.68	5.18	2.03	1.91	4.04	2.57	1.99	32.14
	ARGONNE PRECIPITATION	.87	2.24	3.85	4.66	4.14	2.51	5.45	2.04	2.58	3.69	2.76	2.02	36.81
	PRECIPITATION RATIO	2.20	.70	.88	.52	.83	.67	.95	1.00	.74	1.10	.93	.99	.87
1960	CHICAGO PRECIPITATION	3.07	2.70	1.17	3.02	2.46	4.06	4.27	3.46	1.39	1.33	.81	.46	28.20
	ARGONNE PRECIPITATION	3.31	1.81	.65	4.05	2.39	2.70	1.29	1.91	1.60	1.65	1.12	.36	22.84
	PRECIPITATION RATIO	.93	1.49	1.80	.75	1.03	1.50	3.31	1.81	.87	.81	.72	1.28	1.23
1961	CHICAGO PRECIPITATION	.27	.88	4.01	2.47	2.03	4.20	3.69	1.34	14.61	3.34	1.76	1.35	39.95
	ARGONNE PRECIPITATION	.03	1.09	3.27	2.08	2.01	2.44	3.25	4.24	13.17	2.80	1.77	2.02	38.17
	PRECIPITATION RATIO	9.00	.81	1.23	1.19	1.01	1.72	1.14	.32	1.11	1.19	.99	.67	1.05
1962	CHICAGO PRECIPITATION	2.39	1.18	1.33	1.14	3.38	2.13	5.27	1.62	1.50	.88	.71	.23	21.76
	ARGONNE PRECIPITATION	2.39	1.12	1.55	2.66	3.51	3.69	4.16	2.07	1.72	1.35	.86	.35	25.43
	PRECIPITATION RATIO	1.00	1.05	.86	.43	.96	.58	1.27	.78	.87	.65	.83	.66	.85
1963	CHICAGO PRECIPITATION	.84	.36	2.18	4.88	1.92	2.30	4.09	2.73	2.88	.28	2.00	.73	25.19
	ARGONNE PRECIPITATION	1.25	.91	2.58	3.31	2.40	2.44	7.05	1.24	2.17	1.00	1.42	.75	26.52
	PRECIPITATION RATIO	.67	.40	.85	1.47	.80	.94	.58	2.20	1.33	.28	1.41	.97	.95
1964	CHICAGO PRECIPITATION	.72	.52	3.45	5.22	2.26	2.86	4.23	1.95	3.96	.16	2.90	1.51	29.74
	ARGONNE PRECIPITATION	.71	.63	3.26	5.37	2.31	2.89	3.64	2.67	3.52	.24	1.72	1.08	28.04
	PRECIPITATION RATIO	1.01	.83	1.06	.97	.34	.99	1.16	.73	1.13	.67	1.69	1.40	1.06

APPENDIX I
Data Processing

Argonne meteorological data are available on ten decks of punched cards. These decks are:

<u>Deck Number</u>	<u>Data</u>
103	Hourly Weather Data
203	Daily Average Weather Data
303	Average Hourly Weather Data
403	Daily Maximum and Minimum Data
141	Hourly Wind Direction and Speed Data
241	Daily Average Wind Speed Data
341	Average Hourly Wind Speed Data
120	Hourly Soil Temperature Data
220	Daily Average Soil Temperature Data
320	Average Hourly Soil Temperature Data

Card decks, 103, 141 and 120 are prepared from the hourly measurements of the data. Before the installation of the automatic data processing system² these data were read by hand from the recorder traces of the instruments and punched on cards. The data processing system automatically records hourly data on paper punch tape which is converted to punch cards. The data on punch cards are checked for errors on an IBM model 1401 computer.

Information from these decks is compiled and punched by an IBM model 1401 computer to form the 203, 241 and 220 decks and 303, 341 and 320 decks. The format in which the cards are punched is given below.

The data for the 403 card deck, i.e., the maximum and minimum values, are read by hand for each day, 0001 through 2400 CST, from the recorder charts of the instruments. These readings are punched on cards according to the format shown below.

The card decks were transferred to magnetic tape and processed on the CDC model 3600 computer to produce the tables and graphs used in this report. The tables were printed on an IBM model 1401 system, and the graphs were drawn automatically by a model 580 "Calcomp" system.

All programs for the 3600 system were written in FORTRAN language and are available in the program library of the Applied Mathematics Division, Argonne National Laboratory.

Format for 103 Cards. Hourly Weather Data

<u>Column</u>	<u>Information</u>
1-2	blank
3-5	card identifier (103)
6-7	last two digits of year
8-9	month (01-12)
10-11	day of month (01-31)
12-13	hour of day (01-24), Central Standard Time
14	sign column (see below)
15-17	1.17 foot dewpoint ($^{\circ}$ F)
18	sign column
19-21	2.34 foot dewpoint ($^{\circ}$ F)
22	sign column
23-25	4.69 foot dewpoint ($^{\circ}$ F)
26	sign column
27-29	9.38 foot dewpoint ($^{\circ}$ F)
30	sign column
31-33	131 foot dewpoint ($^{\circ}$ F)
34	sign column
35-37	temperature difference ($^{\circ}$ F), 15.2 minus 5.5 feet
38	sign column
39-41	temperature difference ($^{\circ}$ F), 34.0 minus 5.5 feet
42	sign column
43-45	temperature difference ($^{\circ}$ F), 72.2 minus 5.5 feet
46	sign column
47-49	temperature difference ($^{\circ}$ F), 144 minus 5.5 feet
50	sign column
51-53	net radiation--total Langleys per hour
54	blank
55-57	solar radiation--total Langleys per hour
58	blank for no precipitation, T for trace of precipitation
59-61	precipitation in hundredths of inches
62	sign column
63-66	ambient air temperature ($^{\circ}$ F) at 5.5 feet
67	blank
68-71	station pressure in inches of mercury
72	blank
73-75	relative humidity (percent)

Code for sign columns:

Blank--Entry immediately following is positive.

Negative sign--Entry immediately following is negative.

Format for 203 Cards. Daily Average Weather Data

<u>Column</u>	<u>Information</u>
1-2	blank
3-5	card identifier (203)
6-7	last two digits of year
8-9	month (01-12)
10-11	day of month (01-31)
12-13	blank
14	sign column (see below)
15-17	daily average dewpoint ($^{\circ}$ F) at 1.17 feet
18	sign column
19-21	daily average dewpoint ($^{\circ}$ F) at 2.34 feet
22	sign column
23-25	daily average dewpoint ($^{\circ}$ F) at 4.69 feet
26	sign column
27-29	daily average dewpoint ($^{\circ}$ F) at 9.38 feet
30	sign column
31-33	daily average dewpoint ($^{\circ}$ F) at 131 feet
34-49	blank
50	sign column
51-54	daily total of net radiation in Langleys
55	sign column
56-59	daily total of solar radiation in Langleys
60	sign column
61-64	daily total of precipitation in hundredths of inches
65	sign column
66-69	daily average ambient air temperature ($^{\circ}$ F) at 5.5 feet
70	sign column
71-74	daily average station pressure in inches of mercury
75	sign column
76-78	daily average relative humidity in percent at 5 feet

Code for sign columns:

Blank--Entry immediately following is positive.

Negative sign--Entry immediately following is negative.

4--Entry immediately following is missing.

7--Entry immediately following is incomplete (1-4 observations missing) and is positive.

P--Entry immediately following is incomplete (1-4 obervations missing) and is positive.

Format for 303 Cards. Average Hourly Weather Data

<u>Column</u>	<u>Information</u>
1-2	blank
3-5	card identifier (303)
6-7	last two digits of year
8-9	month (01-12)
10-11	blank
12-13	hour of day (01-24), Central Standard Time
14	sign column (see below)
15-17	average hourly dewpoint ($^{\circ}$ F) at 1.17 feet
18	sign column
19-21	average hourly dewpoint ($^{\circ}$ F) at 2.34 feet
22	sign column
23-25	average hourly dewpoint ($^{\circ}$ F) at 4.69 feet
26	sign column
27-29	average hourly dewpoint ($^{\circ}$ F) at 9.38 feet
30	sign column
31-33	average hourly dewpoint ($^{\circ}$ F) at 131 feet
34	sign column
35-37	average hourly temperature difference ($^{\circ}$ F) between 15.2 and 5.5 feet*
38	sign column
39-41	average hourly temperature difference ($^{\circ}$ F) between 34.0 and 5.5 feet*
42	sign column
43-45	average hourly temperature difference ($^{\circ}$ F) between 72.2 and 5.5 feet*
46	sign column
47-49	average hourly temperature difference ($^{\circ}$ F) between 144 and 5.5 feet*
50	sign column
51-53	average hourly net radiation in Langleys
54	sign column
55-57	average hourly solar radiation in Langleys
58	sign column
59-62	average hourly precipitation in hundredths of inches
63	sign column
64-67	average hourly temperature ($^{\circ}$ F) at 5.5 feet
68	sign column
69-72	average hourly station pressure in inches of mercury
73	sign column
74-76	average hourly relative humidity in percent at 5 feet

Code for sign columns:

Blank--Entry immediately following is positive.

Negative sign--Entry immediately following is negative.

4--Entry immediately following is missing.

7--Entry immediately following is incomplete (1-6 observations missing) and is positive.

P--Entry immediately following is incomplete (1-6 observations missing) and is negative.

*Positive value--temperature increasing with height.

Negative value--temperature decreasing with height.

Format for 403 Cards. Daily Maximum and Minimum Data

<u>Column</u>	<u>Information</u>
1-2	blank
3-5	card identifier (403)
6-7	last two digits of year
8-9	month (01-31)
10-11	day of month (01-31)
12-13	blank
14-17	maximum pressure for day in inches of mercury to nearest hundredth
18	blank
19-22	minimum pressure for day in inches of mercury to nearest hundredth
23	blank
24-26	maximum relative humidity for day in percent
27	blank
28-30	minimum relative humidity for day in percent
31-35	maximum temperature for day in degrees and tenths, Fahrenheit. Column 31 is sign column; blank is positive; negative sign is negative.
36	blank
37-40	time of maximum temperature in hours and minutes of day
41-45	minimum temperature for day in degrees and tenths, Fahrenheit. Column 41 is sign column; blank is positive; negative sign is negative.
46	blank
47-50	time of minimum temperature in hours and minutes of day
51	blank
52-53	highest wind speed gust for day at 18.75-foot level in miles per hour
54	blank
55-58	time of highest gust at 18.75 feet in hours and minutes of day
59	blank
60-61	highest wind speed gust for day at 150-foot level in miles per hour
62	blank
63-66	time of highest gust at 150 feet in hours and minutes of day

Format for 141 Cards. Hourly Wind Direction and Speed Data

<u>Column</u>	<u>Information</u>
1-2	blank
3-5	card identifier (141)
6-7	last two digits of year
8-9	month (01-12)
10-11	day of month (01-31)
12-13	hour of day (01-24), Central Standard Time
14	blank
15-17	hourly wind speed at 9.38 feet in miles and tenths per hour
18	blank
19-21	hourly wind speed at 18.75 feet in miles and tenths per hour
22	blank
23-25	hourly wind speed at 37.5 feet in miles and tenths per hour
26	blank
27-29	hourly wind speed at 75 feet in miles and tenths per hour
30	blank
31-33	hourly wind speed at 150 feet in miles and tenths per hour
34	blank
35-36	wind direction at 18.75 feet in tens of degrees (01-36)*
37	blank
38-39	wind direction at 150 feet in tens of degrees (01-36)*

*Prior to October 1960, a wind direction recorded as 37 is variable and 00 is calm.

Format for 241 Cards. Daily Average Wind Speed Data

<u>Column</u>	<u>Information</u>
1-2	blank
3-5	card identifier (241)
6-7	last two digits of year
8-9	month (01-12)
10-11	day of month (01-31)
12-13	blank
14	sign column (see below)
15-17	daily average wind speed at 9.38 feet in miles and tenths per hour
18	sign column
19-21	daily average wind speed at 18.75 feet in miles and tenths per hour
22	sign column
23-25	daily average wind speed at 37.5 feet in miles and tenths per hour
26	sign column
27-29	daily average wind speed at 75 feet in miles and tenths per hour
30	sign column
31-33	daily average wind speed at 150 feet in miles and tenths per hour
34-40	blank
41-42	number of hourly readings of calm per day (1.9 mph or less) at 9.38 feet
43	blank
44-45	number of hourly readings of calm per day (1.9 mph or less) at 18.75 feet
46	blank
47-48	number of hourly readings of calm per day (1.9 mph or less) at 37.5 feet
49	blank
50-51	number of hourly readings of calm per day (1.9 mph or less) at 75 feet
52	blank
53-54	number of hourly readings of calm per day (1.9 mph or less) at 150 feet

Code for sign columns:

Blank--Entry immediately following is positive.

M--Entry immediately following is missing.

*--Entry immediately following is incomplete (1-4 observations
missing).

Format for 341 Cards. Average Hourly Wind Speed Data

<u>Column</u>	<u>Information</u>
1-2	blank
3-5	card identifier (341)
6-7	last two digits of year
8-9	month (01-12)
10-11	blank
12-13	hour of day (01-24), Central Standard Time
14	sign column (see below)
15-17	average hourly wind speed at 9.38 feet in miles and tenths per hour
18	sign column
19-21	average hourly wind speed at 18.75 feet in miles and tenths per hour
22	sign column
23-25	average hourly wind speed at 37.5 feet in miles and tenths per hour
26	sign column
27-29	average hourly wind speed at 75 feet in miles and tenths per hour
30	sign column
31-33	average hourly wind speed at 150 feet in miles and tenths per hour
34-40	blank
41-42	number of hourly readings of calm per hour for month (1.9 mph or less) at 9.38 feet
43	blank
44-45	number of hourly readings of calm per hour for month (1.9 mph or less) at 18.75 feet
46	blank
47-48	number of hourly readings of calm per hour for month (1.9 mph or less) at 37.5 feet
49	blank
50-51	number of hourly readings of calm per hour for month (1.9 mph or less) at 75 feet
52	blank
53-54	number of hourly readings of calm per hour for month (1.9 mph or less) at 150 feet

Code for sign columns:

Blank--Data immediately following are positive.

M--Data immediately following are missing.

*--Data immediately following are incomplete (1-4 observations missing).

Format for 120 Cards. Hourly Soil Temperature Data

<u>Column</u>	<u>Information</u>
1-3	card identifier
4-5	last two digits of year
6-7	month (01-12)
8-9	day of month (01-31)
10-11	hour of day (01-24), Central Standard Time
12-16	1-cm soil temperature ($^{\circ}$ F)
17-20	10-cm soil temperature ($^{\circ}$ F)
21-24	20-cm soil temperature ($^{\circ}$ F)
25-28	50-cm soil temperature ($^{\circ}$ F)
29-32	100-cm soil temperature ($^{\circ}$ F)
33-36	10-foot soil temperature ($^{\circ}$ F)
37-40	29-foot soil temperature ($^{\circ}$ F)
41-44	100-cm soil temperature ($^{\circ}$ F) (second location)
45-49	temperature ($^{\circ}$ F) under 1 cm of sand
50-54	temperature ($^{\circ}$ F) under 1 cm of black dirt
55-59	temperature ($^{\circ}$ F) under 1 cm of soil covered with Kentucky blue grass
60-64	5.5-foot air temperature ($^{\circ}$ F)
65-80	blank

Note: Columns 12, 17, 21, 25, 29, 33, 37, 41, 45, 50, 55 and 60 are sign columns for the entry immediately following. A blank in these columns indicates entry is positive; a negative sign indicates the entry is negative. Temperatures are given to the nearest tenth degree F.

Format for 220 Cards. Daily Average Soil Temperature Data

<u>Column</u>	<u>Information</u>
1-3	card identifier (220)
4-5	last two digits of year
6-7	month (01-12)
8-9	day (01-12)
10-11	blank
12	sign column (see below)
13-16	daily average 1-cm soil temperature ($^{\circ}$ F)
17	sign column
18-20	daily average 10-cm soil temperature ($^{\circ}$ F)
21	sign column
22-24	daily average 20-cm soil temperature ($^{\circ}$ F)
25	sign column
26-28	daily average 50-cm soil temperature ($^{\circ}$ F)
29	sign column
30-32	daily average 100-cm soil temperature ($^{\circ}$ F)
33	sign column
34-36	daily average 10-foot soil temperature ($^{\circ}$ F)
37	sign column
38-40	daily average 29-foot soil temperature ($^{\circ}$ F)
41	sign column
42-44	daily average 100-cm soil temperature ($^{\circ}$ F) (second location)
45	sign column
46-49	daily average temperature ($^{\circ}$ F) under 1 cm of sand
50	sign column
51-54	daily average temperature ($^{\circ}$ F) under 1 cm of black dirt
55	sign column
56-59	daily average temperature ($^{\circ}$ F) under 1 cm of soil covered with Kentucky blue grass
60	sign column
61-64	daily average 5.5-foot air temperature ($^{\circ}$ F)
65-80	blank

Code for sign columns:

Blank--Entry immediately following is positive.

Negative sign--Entry immediately following is negative.

Note: If more than 4 observations are missing the average is considered missing and all columns are blank. Temperatures are given to nearest tenth degree F.

Format for 320 Cards. Average Hourly Soil Temperature Data

<u>Column</u>	<u>Information</u>
1-3	card identifier (320)
4-5	last two digits of year
6-7	month (01-12)
8-9	blank
10-11	hour (01-24), Central Standard Time
12	sign column (see below)
13-16	average hourly 1-cm soil temperature ($^{\circ}$ F)
17	sign column
18-20	average hourly 10-cm soil temperature ($^{\circ}$ F)
21	sign column
22-24	average hourly 20-cm soil temperature ($^{\circ}$ F)
25	sign column
26-28	average hourly 50-cm soil temperature ($^{\circ}$ F)
29	sign column
30-32	average hourly 100-cm soil temperature ($^{\circ}$ F)
33	sign column
34-36	average hourly 10-foot soil temperature ($^{\circ}$ F)
37	sign column
38-40	average hourly 29-foot soil temperature ($^{\circ}$ F)
41	sign column
42-44	average hourly 100-cm soil temperature ($^{\circ}$ F) (second location)
45	sign column
46-49	average hourly temperature ($^{\circ}$ F) under 1 cm of sand
50	sign column
51-54	average hourly temperature ($^{\circ}$ F) under 1 cm of black dirt
55	sign column
56-59	average hourly temperature ($^{\circ}$ F) under 1 cm of soil covered with Kentucky blue grass
60	sign column
61-64	average hourly 5.5-foot air temperature ($^{\circ}$ F)
65-80	blank

Code for sign columns:

Blank--Data immediately following are positive.

Negative sign--Data immediately following are negative.

Note: If more than 6 observations are missing, the average is considered missing and all columns are blank. Temperatures are given to the nearest tenth degree F.

APPENDIX II

Argonne National Laboratory is located in DuPage County 23 miles southwest of the Chicago loop and 24 miles due west of Lake Michigan (see Figure 1). The site itself consists of 3,700 acres of partly forested, slightly rolling meadow land, approximately 2.5 miles square. The largest topographical feature is the Des Plaines River channel, about one mile wide, through which runs the Des Plaines River and the Chicago Sanitary and Ship Canal. This channel borders the site on the south side and is oriented ENE-WSW. The elevation of the channel surface is 578 feet above sea level. The bluffs, which comprise the south border of the site, rise sharply at the varying slope angles of 15 to 60°, reaching the average elevation of 650 feet at the top. The land then slopes gradually upward for the next 3,000 feet at an average angle of about 15°, reaching the average site elevation of 725 feet above sea level 3,000 feet from the bluffs. Several large ravines oriented in a north-south direction are located in the southern portion of the site. The bluff and ravines generally are forested with deciduous trees of an average height of 50-60 feet. With the exception of a forested area in the center of the site, the remaining portion is gently rolling abandoned farm land with no more rapid change in elevation than 25 feet in a distance of 500 horizontal feet.

The Meteorology Laboratory site is located 746 feet above sea level in an open treeless meadow where the exposure for meteorological measurement is good. The Meteorology tower, on which wind and temperature instruments are mounted, is a standard forest fire look-out tower. The base of the tower cabin is 120 feet high, and a steel mast extends upward through its roof to 150 feet. The nearest obstruction, the Meteorology Building, is 300 feet west of the tower. It is roughly 65 feet long, 20 feet wide and 13 feet high with a 30- x 10-foot extension on the northeast side. The terrain is clear 1,400 feet to the north, 1,500 feet to the east, and about 1,000 feet to the south.

All of the meteorological instruments used to furnish data for this report are located on the Meteorology site. Their location is shown in Figure 2.

Figure 1. Map of the Area Surrounding the Argonne National Laboratory

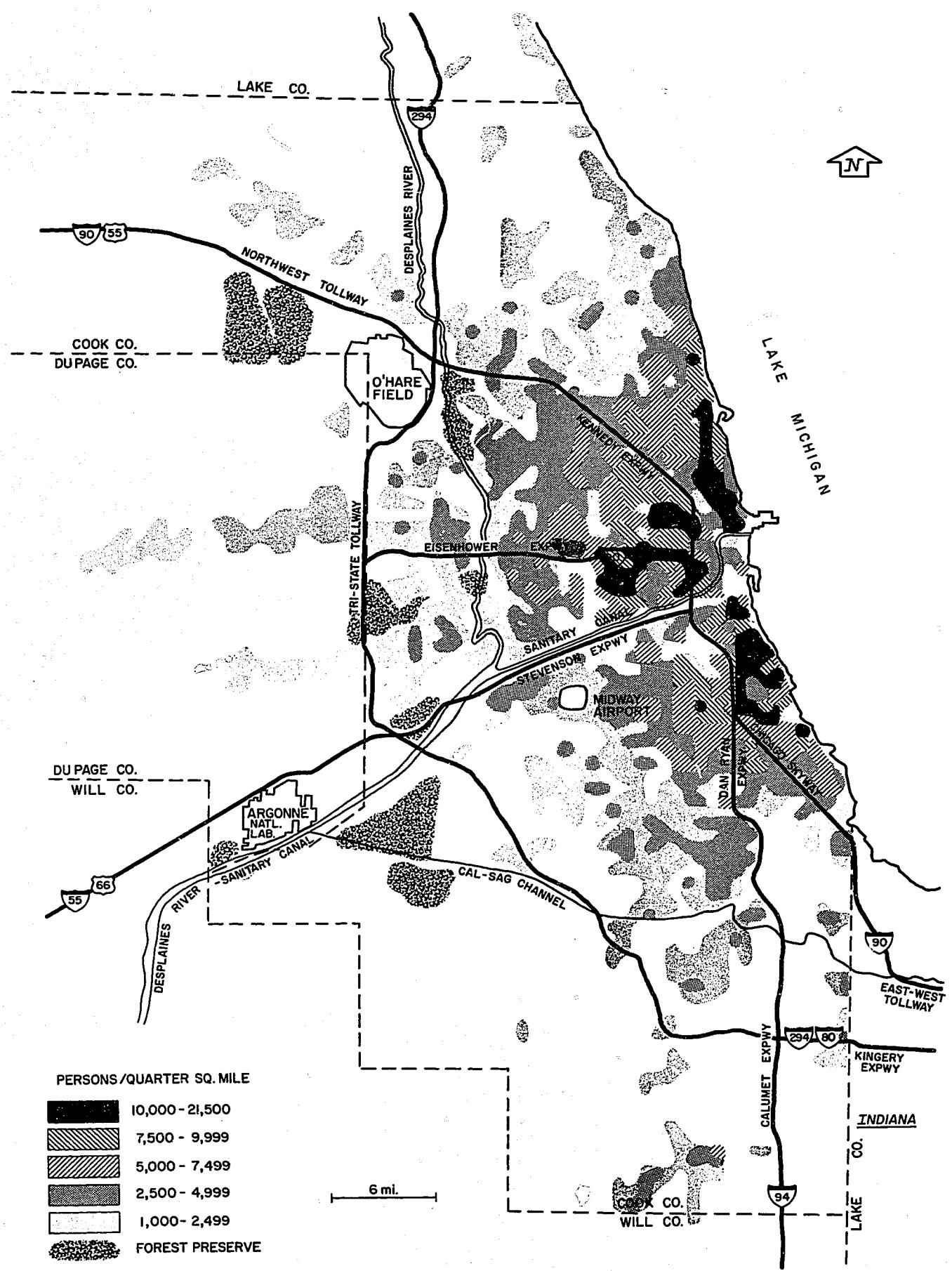
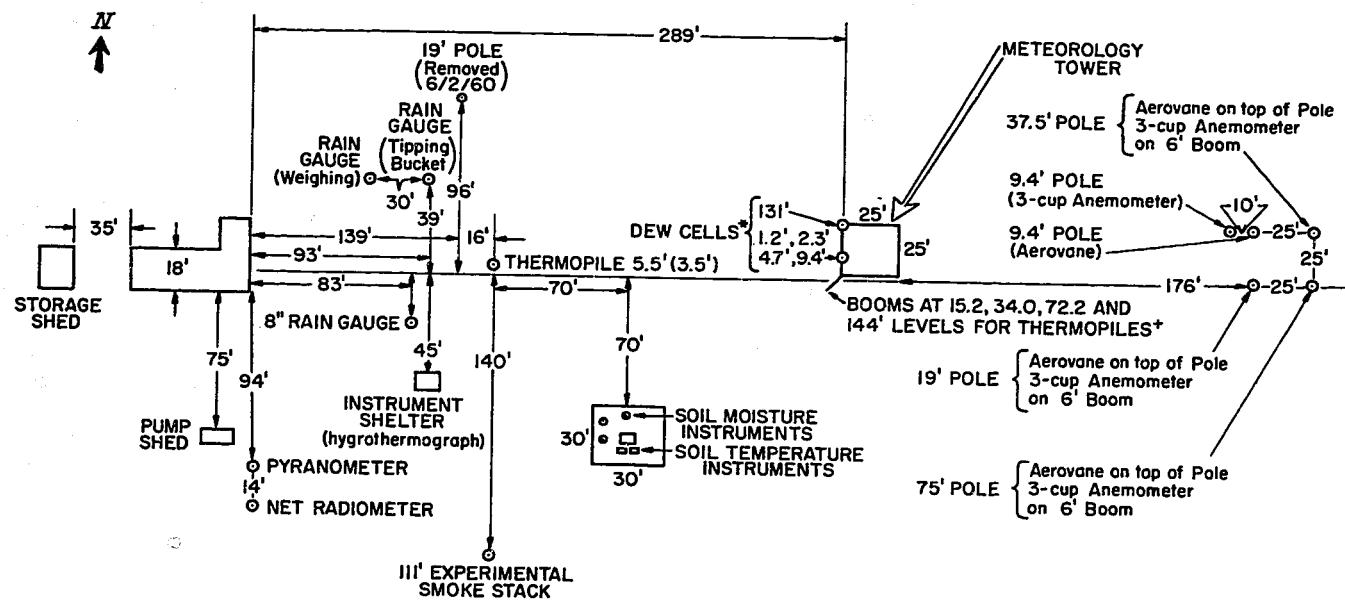


Figure 2. Arrangement of Instruments at the Meteorology Site



*From March 12, 1958 to November 30, 1960 the dew cells were located on the tower at 5.5, 18.75, 37.5, and 75 feet above the ground.

+Data from January 1, 1950 to November 23, 1951 provided by an aerovane mounted on a boom at 18.8 feet on the Meteorology Tower.

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